**PROPOSAL FORM FOR AN ACADEMIC PROGRAMME**

**Craft and Basics of entrepreneurship**

Approved for 2023-2027

Contents

[1. General information 3](#_Toc137339716)

[2. Programme rationale 6](#_Toc137339717)

[3. Teacher’s professional competences 6](#_Toc137339718)

[4. Program structure and learning outcomes 10](#_Toc137339719)

[4.1. Structure of the pedagogical component 10](#_Toc137339720)

[4.2 Structure of the subject component 25](#_Toc137339721)

[4.3 The structure of the compulsory component 62](#_Toc137339722)

[4.4 Progression of the studies 66](#_Toc137339723)

[4.5 Requirements for the successful completion of curriculum 72](#_Toc137339724)

[5. Description of students’ work 72](#_Toc137339725)

[6. Evaluation methods/Assessment 73](#_Toc137339726)

[6.1 Assessment 73](#_Toc137339727)

[6.2 External evaluation 74](#_Toc137339728)

[7. Faculty requirements 76](#_Toc137339729)

[7.1 Faculty Requirements 76](#_Toc137339730)

[7.2 Additionally Required Faculty 76](#_Toc137339731)

[7.3 Required professional development of faculty 76](#_Toc137339732)

[7.4 Required additional administrative staff 76](#_Toc137339733)

[8. Resources 77](#_Toc137339734)

[8.1 Library Resources 77](#_Toc137339735)

[8.2 IT Resources 77](#_Toc137339736)

[8.3 Infrastructure 77](#_Toc137339737)

[9. Additional information 77](#_Toc137339738)

[9.1 Additional materials 77](#_Toc137339739)

[9.2 E-learning 78](#_Toc137339740)

[10. Approval 79](#_Toc137339741)

[**APPENDIX 1**: Main principles of the curriculum 80](#_Toc137339742)

[**Literature** 90](#_Toc137339743)

# 1. General information

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| **1.1. Curriculum title** | **Craft and Basics of entrepreneurship** |
| **1.2. Curriculum developing team:** | |  |  | | --- | --- | | **Leader university** | **Member universities** | | Abai Kazakh National Pedagogical University | Sh. Ualikhanov Kokshetau University | |  | M.Kh.Dulati Taraz Regional University | |  | Kh.Dosmukhamedov Atyrau University | |  | Pavlodar Pedagogical University | |  |  | |
| **1.3. Type of curriculum**  (in accordance with the National Qualifications Framework | BACHELOR'S DEGREE  Level 6 |
| **1.4. Total academic credits** | 240 academic credits |
| **1.5. Study mode** | full-time |
| **1.6. Expected program duration** | 4 years |
| **1.7. Short curriculum description** Curriculum goals and objectives | This Educational Programme (EP) "*Craft and Basics of entrepreneurship*" is a national teacher education curriculum, which has been designed in collaboration by various Kazakh universities and with international consulting. Due to the nature of a national curriculum, the descriptive texts within the curriculum do not provide specific information but highlight general pedagogical principles and cross-cutting themes (see also Annex 1.). The more detailed descriptions of e.g. methodologies and assessment will be identified in the implementation plans of the universities, considering also institutional and regional specific conditions.  Educational programme (EP) "*Craft and Basics of entrepreneurship*" is a teacher education programme for pre-service teachers who wish to specialize in teaching business related disciplines in educational establishments (schools, colleges, high schools). EP consists of a pedagogical component 60 credits (incl. pedagogical practice), a compulsory component 56 credits, and a subject component 124 credits (incl. a final thesis of 8 credits).  Subject component consists of 7 modules: "Society and entrepreneurship", "Public Policy and Business", "Organization and preparation for business", "Design and methods of teaching business planning", "Development of entrepreneurial culture", “Communication and Leadership Skills”, “Innovation and Research in Business”.  EP "*Craft and Basics of* *Entrepreneurship*" is aimed at training of a professional teacher with communicative and digital competencies, capable of implementing formal and informal labour training aimed at mastering various forms and practices of creative self-expression, national identity and cultural diversity in the field of handicrafts and entrepreneurship. The characteristic of this educational programme is that it covers the basics of management, entrepreneurship and is aimed at developing leadership qualities and managerial competencies, creating start-up projects, and implementing business plans.  EP provides an equal opportunity for learning without compromising pre-service teachers' rights and interests, preserving the principles of equality, respect, tolerance. It is interdisciplinary, student-oriented, scientifically integrated and problem-oriented by nature, and the selection of courses is guided by the topical issues of history and society and corresponds also to the international course descriptors.  EP is based on the principles of constructive alignment, where teaching and assessment methods, as well as subject-specific courses are selected to ensure the achievement and measurement of the competences outlined in the EP. The EP also follows an inclusive approach considering the multi-ethnic and multi-confessional composition of per-service teachers and their versatile needs for support of learning. |
| **1.8 Main principles of the curriculum** | |
| **Competence-based teacher education**  A teacher’s expertise combines competence in pedagogy and their own subject-specific field with theoretical and practical teaching competence in different kinds of operating environments. A teacher has mastery of the knowledge and skill requirements of their subject-specific field and thus is able to teach and supervise young people and adults studying for the same subject.  The competence of a teacher is focused on planning, guidance, teaching and assessment. For this reason, teacher must have sufficient theoretical knowledge of learning and competence development. In addition, modern working life emphasises cooperation and networking, development skills, and the support and maintenance of the well-being of oneself and one’s community.  A teacher’s competence is influenced by changes in the labour market, the structures of education and society as a whole, and all these elements are emphasised in the dynamic nature of a teacher's work. Work characterized by continual change in the variety of working environments places an emphasis on the teacher’s ability to assess and adjust their own activities. Self-assessment skills are an essential part of developing one’s professional identity. A teacher is making value decisions all the time, which means that the consideration of questions of professional ethics is one of the professional skills needed. Change requires the development of expertise, the ability to learn, as well as the ability to reform and renew the way things are done as part of a community.  **Competence-based teacher education curriculum**  The competence-based teacher education curriculum is formed of three entities: 1) Pedagogical studies, 2) Subject-specific studies 3) Compulsory studies. Each of the entities includes modules and related courses. The courses’ learning outcomes describe the competences required in teaching work and are placed in the NQF system’s (National Qualifications Framework) reference level six.  **The curriculum is guided by the following main principles:**   * Competence-based learning * Constructive alignment * Student-centred learning and active learning methodologies * Research-based teaching * Interdisciplinary learning * Inclusion * Teacher professional development and change management   (see Appendix for more details) | |

# 2. Programme rationale

In the context of the Education Modernization Project funded by the World Bank, several universities providing pre-service teacher education have designed and revised in international collaboration thirty (30) pre-service teacher education curricula according to the principles of competence-based education that ensure a holistic development of pre-service teachers’ competences. Moreover, the student-centered approach better prepares pre-service teachers to teaching profession by providing practical examples, experiments and experiences, which pre-service teachers can transfer to their classroom practices considering better the versatile needs and wellbeing of their students.

In order to match the requirements of the renewed primary and secondary education, teachers’ professional competences need to be re-evaluated and completed. The new approaches in secondary education need to be reflected in pre-service teacher education and the pre-service teachers’ profiles. Furthermore, these thirty (30) revised or new pre-service teacher education curricula have been designed to better improve pre-service teachers’ various generic competences that are essential in teacher’s profession. Several important and cross- cutting pedagogical principles that Kazakhstan education system aims to develop, such as inclusiveness and interdisciplinarity, have been taken into consideration in the design and implementation of the curricula. In addition, these curricula emphasize the development of pre-service teachers’ research skills in a way that they become practitioners who are constantly reflecting and evaluating their own practices and the practices of their schools to develop their own work and their work community, and the whole sector of education.

# 3. Teacher’s professional competences

Teachers’ professional competences are defined as consisting of **pedagogical competences** and **subject-specific competences** as well as **generic competences**. The competence-based teacher education curriculum is thus formed of three entities: 1) Pedagogical studies, 2) Subject-specific studies 3) Compulsory studies. Competence areas and competences have been defined separately for each entity.

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| **3.1. Pedagogical and Generic Competence Areas/Learning Outcomes** |
| * **Competence area for pedagogy and didactics**  1. Pre-service teachers have basic knowledge and understanding of learning and students and are able consider the diversity of students in learning/teaching process and support their well-being in psychologically and ethically sound manner considering their life and learning contexts. 2. Pre-service teachers are capable to design, implement, assess, and develop learning and guidance processes in different kinds of learning environments in a pedagogically meaningful way including ability to utilize different digital resources in a manner that supports learning.  * **Competence area for interaction**  1. Pre-service teachers are able to communicate in different interactive relationships and partner networks in a meaningful manner both in face-to-face and online settings with regard to the goals set for the activity in question. 2. Pre-service teachers are capable of working in different collaboration networks and have the ability to create new relationships that are appropriate for the development of one's own and one's community activities. 3. Pre-service teachers are able to teach in accordance with the tri-lingual approach in secondary education and participate in the global professional community.  * **Competence area for teachers´ work environment**  1. Pre-service teachers are familiar with the international and national agreements and documents as well as legislation that affects his/her institution´s and his/her work. 2. Pre-service teachers are able to (a) to perceive his / her own activities in relation to the activities of his/her organization, and (b) work in a meaningful way to create positive relationships between the partners outside the school (families, regional actors, working life).  * **Competence area for professional development**  1. Pre-service teachers are able to reflect and critically assess their values, attitudes, ethical principles and work methods as a teacher and are able to set new goals to his/her own and his/her organization´s pedagogical development. 2. Pre-service teachers are able to develop his / her own and his / her organization's pedagogical activities in relation to the anticipated changes at regional, national and international level. 3. Pre-service teachers are able to produce, seek and critically select theoretical knowledge that, combined with experiential knowledge, serves the development of both him/her and his/her community's theory-in-use, and the ability and willingness to use knowledge to promote learning and own professional growth. |
| **3.2 Subject-specific and Generic Competence Areas/ Learning Outcomes** |
| * **Competence area for Theory of art and Fundamentals of Entrepreneurship**   1. Pre-service teachers are able to organize the process of artistic perception of art works on the basis of basic knowledge and understanding of the evolution of the world and domestic fine arts skills introduction of entrepreneurial activity in the field of art.   2. Pre-service teachers are able to analyze art products, express and correctly express judgments about art works, have skills to develop and implement startup projects within the framework of art entrepreneurship and creative economy. * **Competence area for Artistic skill**   1. Pre-service teachers are able to perform works of fine arts in various types and genres on the basis of knowledge of the theory of composition, patterns of images on the plane, plastic anatomy, on the basis of creative research, using traditional and modern materials and techniques.   2. Pre-service teachers have practical skills in artistic processing of traditional and modern materials, skills of creating works in various types and genres of decorative and applied art and souvenirs adapted to the art market, using traditional, modern and digital technologies.   3. Pre-service teachers are able to organize and support an aesthetic environment based on special knowledge in landscape design and interior design. * **Competence area for Digital Art and Design**   1. Pre-service teachers are able to master the skills of developing creative and technical projects based on knowledge of modern design theory and design   2. Pre-service teachers are able to develop art products and design projects using digital technologies and tools of professional computer programs. |
| **3.3 Compulsory component: Competence Areas/ Learning Outcomes** |
| * **Competence area for worldview, historical, and moral development**  1. Pre-service teachers are able to assess the surrounding reality on the basis of ideological positions, formed by a knowledge of the fundamentals of philosophy, which provide scientific understanding and study of the natural and social world by methods of scientific and philosophical knowledge. 2. Pre-service teachers are capable to interpret the content and specific features of the mythological, religious and scientific worldview 3. Pre-service teachers have deep understanding and scientific analysis of the main stages, patterns and characteristics of the historical development of Kazakhstan. 4. Pre-service teachers are able to analyse the causes and consequences of the events in the history of Kazakhstan.  * **Competence area for social, cultural, and civic development**  1. Pre-service teachers are able to develop their own moral and civic position and able to operate with the social, business, cultural, legal and ethical norms of society. 2. Pre-service teachers have knowledge and understanding of the basics of socio-political, economic and legal studies and are able to demonstrate personal and professional competitiveness. 3. Pre-service teachers are able to assess situations and provide arguments for their own assessments of developments in the social and work environment.  * **Competence area for interpersonal social and professional communication**  1. Pre-service teachers are able to assess situations in various spheres of interpersonal, social and professional communication and enter into communication in oral and written forms in Kazakh, Russian and foreign languages. 2. Pre-service teachers are able to use in their personal activities various types of information and communication technologies: Internet resources, cloud and mobile services for searching, storing, processing, protecting and distributing information. 3. Pre-service teachers are able to maintain a healthy lifestyle to achieve productive social and professional activities through the methods and means of physical education. 4. Pre-service teachers are able to select methodology and analysis, use scientific research methods and techniques, and synthesise new knowledge. |

# 4. Program structure and learning outcomes

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| 4.1. Structure of the pedagogical component |
| The extent of the Pedagogical Component shall be 60 academic credits, including teaching practice. This component is common for all curricula in initial teacher education. The Pedagogical Component has been jointly created by all the involved universities in a collaborative design process. The component is flexible and leaves space for individual universities to implement it according to their specific situation and needs.  The overall structure of the pedagogical studies component:   |  |  | | --- | --- | | **Module name and main disciplines** | **Academic credits** | | **SUPPORTING LEARNERS AS INDIVIDUALS** | **17** | | Psychology in Education and Concepts of Interaction and Communication | 4 | | Educational Science and Key Theories of Learning | 3 | | Age and Physiological Features of the Development of Children | 3 | | Inclusive Educational Environment | 3 | | Teaching Planning and Individualization of Learning | 4 | | **TEACHING AND ASSESSMENT FOR LEARNING** | **9** | | Teaching Methods and Technologies | 5 | | Assessment and Development | 4 | | **TEACHER AS A REFLECTIVE PRACTITIONER** | **9** | | Pedagogical Research | 4 | | Research, Development and Innovation | 5 | | **TEACHER AS A FACILITATOR OF LEARNING (PEDAGOGICAL PRACTICE)** | **25** | | Introduction to the teaching profession (1st year pedagogical practice) | 2 | | Psychological and pedagogical assessment (2nd year pedagogical practice) | 2 | | Pedagogical approaches (3rd year pedagogical practice) | 6 | | Research and innovation in education (4th year pedagogical practice) | 15 | | **Total academic credits** | **60** |   The modules, courses, their learning outcomes, and relation to competence areas in more detail:   |  | | --- | | **Supporting learners as individuals 17 Academic credits** | | This module provides an overview of psychological theories, concepts, and models which help to understand the pupils’ individual needs and individual differences in learning. The module provides the pre-service teachers with competences to acknowledge individualization of learning and the diversity of learners in teaching. The module highlights the importance of enhancing learner well-being through creating and maintaining a psychologically safe educational environment. |  |  |  | | --- | --- | | Course title | **Psychology in Education and Concepts of Interaction and Communication** | | Component | Pedagogical component | | Cycle | Core disciplines | | Module | Supporting learners as individuals 17 Academic credits | | Academic credits | 4 | | Course / competence description | The purpose of this course is to improve the following areas of pedagogical competence:   * Competence area for pedagogy and didactics (1) * Competence area for interaction (3, 4)   Pre-service teachers are familiar with the modern psychological theories and models, as well as personality functioning and individual properties. They can apply the knowledge in their teaching in diverse educational contexts. Pre-service teachers support positive development of learners by fostering dialogue, interaction, and communication in the educational process. They are able to communicate, interact, and collaborate with pupils’ families as well as in various other partnership networks and create new relationships suitable for the development of their own pedagogical activity. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * understand the basic concepts and terms of educational psychology, and the main practical applications of psychological knowledge; * understand the patterns, facts, and phenomena of cognitive and personal development of a person in the processes of education and upbringing; * apply an integrated approach to design, implementation, evaluation, and development of educational environments; * understand the concept of continuous learning as a part of the process of cognitive and personal development of a person. * apply basic communication and interaction concepts and theories at the individual, community, and network levels; * select the methods of communication and interaction that are most appropriate to facilitate learning in various forms (offline, online, blended, hybrid); * recognize the patterns of group dynamics and act in ways that promote community development and well-being. |  |  |  | | --- | --- | | Course title | **Educational Science and Key Theories of Learning** | | Component | Pedagogical component | | Cycle | Core disciplines | | Module | Supporting learners as individuals 17 Academic credits | | Academic credits | 3 | | Course / competence description | The purpose of this course is to improve the following areas of pedagogical competence:   * Competence area for pedagogy and didactics (1, 2)   Pre-service teachers explore the basics of educational science such as the conceptions of man leading to various learning theories and pedagogical models. Based on their understanding of the theoretical concepts, pre-service teachers are able to make appropriate pedagogical choices for various learning situations. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * distinguish between concepts of human and their importance for understanding learning and the design of an educational process; * differentiate between learning theories and their importance for understanding learning and the design of an educational process; * apply learning theories and pedagogical models suitable for versatile learning processes. |  |  |  | | --- | --- | | Course title | **Age and Physiological Features of the Development of Children** | | Component | Pedagogical component | | Cycle | Core disciplines | | Module | Supporting learners as individuals 17 Academic credits | | Academic credits | 3 | | Course/ competence description | The purpose of this course is to improve the following areas of pedagogical competence:   * Competence area for pedagogy and didactics (2)   Pre-service teachers are familiar with the formation of psyche, its functioning, and the patterns of development. Pre-service teachers can observe the development of their students, and accordingly, plan and implement age-appropriate learning processes considering individual needs of students. Pre-service teachers act creatively and appropriately in different situations and support learning and well-being of the learners. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * recognize the individual starting points of different students, their learning potential and specific support needs; * consider the individual needs of their students for specific support, guidance, teaching and assessment; * introduce various methodological solutions for inclusion and for providing specific support. |  |  |  | | --- | --- | | Course title | **Inclusive Educational Environment** | | Component | Pedagogical component | | Cycle | Core disciplines | | Module | Supporting learners as individuals 17 Academic credits | | Academic credits | 3 | | Course / competence description | The purpose of this course is to improve the following areas of pedagogical competence:   * Competence area for pedagogy and didactics (2) * Competence area for teachers´ work environment (6, 7)   Pre-service teachers have the ability to consider the diversity of learners and identify their individual needs in the learning / teaching process. Pre-service teachers support students’ learning and inclusion in the educational process by using suitable ICT, teaching and assistive technologies. Pre-service teachers maintain students’ well-being from psychological and ethical perspective in collaboration with the community (teachers, students, parents/guardians) considering the context of students’ life and learning. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * identify the individual educational needs that affect participation and learning in a diverse group of students; * use ICT and assistive technologies to support students’ learning and inclusion in the educational process. * teach values and attitudes beneficial to collaboration and inclusivity; * support collaboration in the community (teachers, students, parents/guardians). |  |  |  | | --- | --- | | Course title | **Teaching Planning and Individualization of Learning** | | Component | Pedagogical component | | Cycle | Core disciplines | | Module | Supporting learners as individuals 17 Academic credits | | Academic credits | 4 | | Course / competence description | The purpose of this course is to improve the following areas of pedagogical competence:   * Competence area for pedagogy and didactics (1, 2)   Pre-service teachers are familiar with the curriculum in their area of teaching and the guiding pedagogical principles and cross-cutting development themes of a specific level of education, such as entrepreneurship and sustainable development. Pre-service teachers possess the necessary skills of individualization of teaching, considering the diversity of students and their inclusion to the learning process, as well as the use of teaching technologies, based on pedagogical and independent research. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * understand the main principles and requirements of the curriculum in their area of teaching and apply them in planning and conducting educational activities; * identify factors and conditions that affect students’ learning; * apply in practice the principles of inclusion as well as individualized teaching and guidance (adapting curricula, developing differentiated lessons) by considering the needs of the students and support the development of their personality and self-esteem, including career guidance. |  |  | | --- | | **Teaching and assessment for learning 9 Academic credits** | | This module provides the teacher students with competencies to carry out interactive and student-centered teaching and assessment aligned with learning objectives. The module highlights the use of digital tools and technologies and the ability to update and apply teaching technologies in the context of ongoing changes in the society and the educational environment. This module supports the pre-service teachers’ competence to communicate and collaborate in various partnership networks to enhance own pedagogical activity. |  |  |  | | --- | --- | | Course title | **Teaching Methods and Technologies** | | Component | Pedagogical component | | Cycle | Core disciplines | | Module | Teaching and assessment for learning 9 Academic credits | | Academic credits | 5 | | Course / competence description | The purpose of this course is to improve the following areas of pedagogical competence:   * Competence area for pedagogy and didactics (1, 2)   Pre-service teachers have a comprehensive understanding of teaching strategies and methodologies, and can apply them in planning, teaching, and assessment in innovative ways matching the specific pedagogical situations, conditions of a specific school and the capabilities of students. Pre-service teachers are able to design suitable inclusive physical and online learning environments at different stages of the educational process. Pre-service teachers understand and can apply the regulations of copyright and data protection in their learning material planning. Pre-service teachers possess necessary knowledge of didactics, learning technologies and methods of motivating students being able to provide necessary pedagogical assistance to students. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * select pedagogical models suitable for teaching; * apply teaching methods in a creative and varied manner, considering the opportunities offered by learning technologies; * use a suitable inclusive learning environment in their teaching; * acknowledge and apply the norms and principles of copyright and data protection; * apply guidance methods to motivate students and to support their learning achievements. |  |  |  | | --- | --- | | Course title | **Assessment and Development** | | Component | Pedagogical component | | Cycle | Core disciplines | | Module | Teaching and assessment for learning 9 Academic credits | | Academic credits | 4 | | Course / competence description | The purpose of this course is to improve the following areas of pedagogical competence:   * Competence area for pedagogy and didactics (2)   Pre-service teachers have a thorough understanding of the meaning of assessment in learning process and are able to provide constructive assessment in ethical manner in different phases of learning processes and engage learners in assessment. Pre-service teachers identify, differentiate, and use different assessment technologies, principles, stages, and assessment tools in their own field of expertise (including formative and summative assessment and self-and peer- assessment, etc). They can critically evaluate and analyze their understanding and practices concerning assessment and develop them further. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * use and apply a variety of methods and tools of assessment and feedback (formative and summative assessment); * apply pedagogical principles in defining and recognizing competence levels of learners; * understand the importance and support the development of students’ self- and peer-assessment skills. |  |  |  | | --- | --- | | **Teacher as a reflective practitioner 9 Academic credits** | | | This module focuses on the methodological foundations of pedagogy, and it provides understanding of how pedagogical research informs teaching practices. The module helps the pre-service teachers to develop their reflection skills to become aware of themselves as teachers and to develop their own teaching as well as the ability to set new goals for pedagogical development to ensure lifelong learning. The module also addresses the ethical aspects of the teachers’ work and its development. |  |  |  | | --- | --- | | Course title | **Pedagogical Research** | | Component | Pedagogical component | | Cycle | Core disciplines | | Module | Teacher as a reflective practitioner 9 Academic credits | | Academic credits | 4 | | Course / competence description | The purpose of this course is to improve the following areas of pedagogical competence:   * Competence area for professional development (10)   This course provides pre-service teachers with a theoretical foundation on pedagogical research. Pre-service teachers possess skills to seek and critically select theoretical knowledge from various reliable sources, utilize research findings in the development their pedagogical thinking and practice, and adopt willingness to promote research-based learning and education as well as their own continuing development and professional growth. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * recognize the nature of pedagogy and its basic terminology; * identify the central areas of research in pedagogy and understand the difference between everyday thinking and scientific knowledge; * follow the changes in the field of education and consider how they influence own work as a teacher. |  |  |  | | --- | --- | | Course title | **Research, Development, and Innovation** | | Component | Pedagogical component | | Cycle | Core disciplines | | Module | Teacher as a reflective practitioner 9 Academic credits | | Academic credits | 5 | | Course / competence description | The purpose of this course is to improve the following areas of pedagogical competence:   * Competence area for professional development (8, 9) * Competence area for interaction (5)   To stay up-to-date and be able to continuously develop themselves and their work, pre-service teachers acquire new research-based knowledge and conduct practice-based research in an ethical manner in various networks concerning the development of education and teacher profession, innovative approaches to learning, as well as learning and guidance of students. Pre-service teachers adopt development-oriented mindset and are able to develop, update and apply innovative teaching approaches and technologies in the context of ongoing changes in society and the educational environment.  Pre-service teachers design a small-scale research project to familiarize themselves with research-based development of their work as teachers. They identify their research topic/questions, conduct the literature review and design the methodology for the data collection and analysis, including ethical aspects of research. After the course, pre-service teachers are able to develop and update their pedagogical activities based on ethically conducted research and development and carry out or participate in research projects. They are also able to present their research and development results using various professional forms and channels. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * evaluate their own professional activities and work environment to find areas for improvement; * apply a research-based approach to their professional activities and carry out independent research work; * consider and apply ethical aspects of research procedures; * apply critical thinking in data collection and utilization for the development of initial teacher education; * participate in scientific design research and / or develop cooperation between universities and stakeholders; * document their own research activities and present the results using various forms of communication. |  |  |  | | --- | --- | | **Teacher as a facilitator of learning (Pedagogical practice) 25 Academic credits** | | | This module focuses on the transformation of theoretical knowledge into practical skills through two pedagogical practice periods/courses, as well as the formation of a teacher’s professional identity that meets the requirements of teaching profession today and in the future. During the module, pre-service teachers also establish practice-based research skills promoting the continuous process of professional growth.  Pedagogical practice is organized in four periods/courses, one per study year, and each having their specific learning outcomes where the competences of pre-service teachers are progressively deepened from orientation and observation to designing educational processes and conducting own lessons, and developing own work environment through practice-based research activities.  All practice periods have some prerequisites and pre-service teachers must have completed a certain amount of subject and/or pedagogical studies before they can conduct their pedagogical practice, the number of credits may vary between the faculties and/or educational programmes. |  |  |  | | --- | --- | | Course title | **Introduction to the teaching profession (1st year pedagogical practice)** | | Component | Pedagogical component | | Cycle | Core disciplines | | Module | Teacher as a facilitator of learning 25 Academic credits | | Academic credits | 2 | | Course / competence description | The purpose of this course is to improve the following areas of pedagogical competence:   * competence area for pedagogy and didactics​ (1, 2) * competence area for interaction (3, 4, 5) * competence area for teachers´ work environment (6, 7) * competence area for professional development (8, 9, 10)   Pre-service teachers familiarize themselves with the educational process and the context of the educational institution and its adaptation to the conditions of future professional activity.  The prerequisite for the course is that the Pre-service teachers have completed the courses "*Psychology in Education and Concepts of Interaction and Communication* " and "*Age and physiological features of the development of children*" of the pedagogical component before entering their first pedagogical practice. | | Learning outcomes | **Pre-service teachers** **who demonstrate competence can:**   * understand the regulatory and legislative framework of the education system of the Republic of Kazakhstan, and the documents regulating educational institutions; * distinguish the main documents for maintaining school records (work plans of the educational institution, Kundelik electronic diary, short-term, medium-term and long-term lesson planning, etc.); * comprehend the theoretical and applied aspects of pedagogy and educational psychology in the educational process at school considering social, age, psychophysical and individual characteristics of students, as well as their special educational needs. |  |  |  | | --- | --- | | Course title | **Psychological and pedagogical assessment (2nd year pedagogical practice)** | | Component | Pedagogical component | | Cycle | Core disciplines | | Module | Teacher as a facilitator of learning 25 Academic credits | | Academic credits | 2 | | Course / competence description | The purpose of this course is to improve the following areas of pedagogical competence:   * competence area for pedagogy and didactics​ (1, 2) * competence area for interaction (3, 4, 5) * competence area for teachers´ work environment (6, 7) * competence area for professional development (8, 9, 10)   Pre-service teachers familiarize themselves with the features of the integral pedagogical process of an educational institution and the formation of analytical-reflexive, research, design, and other skills in the field of psychological and pedagogical support of the educational process.  The prerequisite for the course is that the Pre-service teachers have completed the course "*Pedagogical Research*" of the pedagogical component before entering their second pedagogical practice. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * + comprehend the psychological and pedagogical foundations of teaching strategies (critical thinking, functional literacy, collaborative learning, self-education, self-improvement, criteria-based learning);   + apply psychological and pedagogical diagnostic methods to evaluate the needs of a group of students, and understand how the support processes of the student welfare services function in schools;   + understand teacher’s work from the socio-pedagogical aspect and reflect own professional identity as a future teacher;   + establish effective dialogue to reinforce students’ positive and responsible learning behaviours;   + collaborate with all stakeholders of the educational process;   + analyze and develop a holistic pedagogical process in its various forms (lesson, seminar, round table, debate, etc.), and conduct various forms of subject-related extracurricular activities. |  |  |  | | --- | --- | | Course title | **Pedagogical approaches** **(3rd year pedagogical practice)** | | Component | Pedagogical component | | Cycle | Core disciplines | | Module | Teacher as a facilitator of learning 25 Academic credits | | Academic credits | 6 | | Course / competence description | The purpose of this course is to improve the following areas of pedagogical competence:   * competence area for pedagogy and didactics​ (1, 2) * competence area for interaction (3, 4, 5) * competence area for teachers´ work environment (6, 7) * competence area for professional development (8, 9, 10)   During this course, pre-service teachers go through a comprehensive professional development where they improve in practice their professional practices and develop their pedagogical and subject-specific competences necessary for a teacher (preschool teacher, primary school teacher, subject teacher, assistant class teacher / curator).  The prerequisite for the course is that the Pre-service teachers have completed the courses "*Methods and Technologies of Teaching*", "*Assessment and Development*", and "*Inclusive Educational Environment*" of the pedagogical component before entering their third pedagogical practice. | | Learning outcomes | **Pre-service teachers** **who demonstrate competence can:**   * + design and organize independently a constructive and inclusive educational process;   + choose purposeful and suitable learning materials, innovative pedagogical approaches, and active teaching considering also the use of educational technologies and digital environments;   + apply subject-specific knowledge and didactics;   + apply formative and summative assessment methods and techniques, and support the development of students’ reflection, self- and peer-assessment skills;   + establish dialogical atmosphere with all stakeholders of the educational process to solve problems and conflict situations and to promote safe learning environment. |  |  |  | | --- | --- | | Course title | **Research and innovation in education (4th year pedagogical practice)** | | Component | Pedagogical component | | Cycle | Core disciplines | | Module | Teacher as a facilitator of learning 25 Academic credits | | Academic credits | 15 | | Course / competence description | The purpose of this course is to improve the following areas of pedagogical competence:   * competence area for pedagogy and didactics​ (1, 2) * competence area for interaction (3, 4, 5) * competence area for teachers´ work environment (6, 7) * competence area for professional development (8, 9, 10)   The course focuses on establishing pre-service teachers’ developmental approach towards their own professional activities and work environment. The course also emphasizes the development of pre-service teachers’ collaborative, problem-solving and leadership skills. They deepen their pedagogical skills and develop research skills as well as practical skills (didactics) in accordance with their area of specialization.  During this practice period pre-service teachers also collect and analyze data,test the hypothesis, or make experimentationsaccording to the research plan created in the course *“Research, Development, and Innovation”.* They make conclusions and explorevarious forms and channels of communicating the research results in a professional manner.  The prerequisite for the course is that the Pre-service teachers have completed the courses "*Teaching planning and individualization of learning*" and "*Research, development and innovation*" of the pedagogical component. | | Learning outcomes | **Pre-service teachers** **who demonstrate competence can:**   * + design and organize independently a constructive and inclusive educational process to test hypothesis, make pedagogical experimentations and/or collect data according to their research plan;   + apply innovative teaching and learning strategies, and methods and tools for designing, conducting and assessing an educational process and/or extracurricular activities based on long-term, medium-term, short-term lesson / lesson plans, and educational and out-of-class activities in the subject;   + analyze the results of their experimentations and/or data collected and draw conclusions;   + document their research activities and present the results in a professional manner using various forms of communication;   + evaluate their professional activities in relation to the activities of the organization and through experimentations and practice-based research create ideas for improvement of their work and their work environment. | |
| 4.2 Structure of the subject component |
| |  |  | | --- | --- | | **Module name and main disciplines** | **Academic credits** | | **ART THEORY AND PRACTICE** | **27** | | **University Component** | **18** | | The history of fine art and art research | 5 | | Basics of composition | 5 | | Fundamentals of Academic Drawing | 4 | | Methods of teaching craft education and technology | 4 | | **Optional Component** | **9** | | Fundamentals of academic painting | 4 | | Color science | | Art History of Kazakhstan | 5 | | Art education | | **FUNDAMENTALS OF ENTREPRENEURSHIP** | **22** | | **University Component** | **17** | | Fundamentals of Entrepreneurship | 5 | | Art management | 5 | | Home economics. | 5 | | Occupational health and safety | 2 | | **Optional Component** | **5** | | Marketing essentials | 5 | | Advertising and marketing | | **CREATIVE MASTERY** | **23** | | **Optional Component** | **23** | | Artistic weaving and processing of textile materials | 4 | | Carpet weaving and textile art processing | | Sewing technology | 5 | | Fashion design | | Modeling and decoration of clothes | 5 | | Design and accessories | | Home and Food culture | 4 | | Aesthetics of man-made environment | | Design and layout | 5 | | Architectural graphics and layout | | **DECORATIVE AND APPLIED CREATIVITY** | **22** | | **University Component** | **6** | | Artistic processing of traditional materials | 6 | | **Optional Component** | **16** | | Artistic metal processing | 5 | | Jewelry art | | Composition of small forms | 5 | | Ceramics and pottery | | Working with natural materials | 6 | | Paper plastic and applique | | **DESIGN AND MODERN TECHNOLOGY** | **22** | | **University Component** | **13** | | Design Basics | 4 | | Computer graphics | 5 | | Design modern computer programs | 4 | | **Optional Component** | **9** | | Engineering graphics | 5 | | Descriptive geometry and perspective | | Modern design | 4 | | Digital Art | | **FINAL ATTESTATION** | **8** | | **Total academic credits** | **124** |  |  | | --- | | **Theory and practice of art 27 academic credits** | | During the module, pre-service teachers develop their knowledge of world and national Kazakh art history. They learn about the basics of composition and academic drawing and establish basic skills in artistic perception of the art, including analysis and interpretation of art works. Pre-service teachers perform creative works in various types of fine art and learn to apply them in their work as a teacher. |  |  |  | | --- | --- | | Course title | **The history of fine art and art research** | | Component | Subject component, University component | | Cycle | Major disciplines | | Module | Theory and practice of art 27 academic credits | | Academic credits | 5 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Art theory and fundamentals of entrepreneurship (1, 2)   Through an independent art research, pre-service teachers summarize and systematize information in the evolution of fine art as part of the evolution of society, and the main milestones of the formation and development of fine art from antiquity to the present, including the tangible and intangible heritage of UNESCO. Based on the independent art research, pre-service teachers acquire skills in artistic perception and interpretation of the world art from various periods, styles and schools. They understand the importance of art as a special aesthetic sphere of activity and its role in the development of students’ personality and creative potential. They also learn to organize the pedagogical process of artistic perception of students’ art works. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * Use the acquired knowledge about the logic of evolution of art, its styles, schools, and directions in the process of interpretation and aesthetic evaluation of art as a teacher in the practical activities in formal and non-formal education; * Apply knowledge about art and the choice of artistic style and expressive means as a teacher in the practical activities in formal and non-formal education; * Apply the process of artistic perception as a pedagogical practice at school. |  |  |  | | --- | --- | | Course title | **Basics of composition** | | Component | Subject component, University component | | Cycle | Major disciplines | | Module | Theory and practice of art 27 academic credits | | Academic credits | 5 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Art theory and fundamentals of entrepreneurship (1, 2)   Pre-service teachers develop their knowledge in theory of composition – principles, laws, techniques and means of composition, and rules of arrangement in various types of fine art (painting, graphics, sculpture). They also learn to perform educational and creative realistic and stylized compositions in various types of fine art using the theory of composition. Pre-service teachers understand the role of compositional skills in the process of teaching creativity, and they are able to critically evaluate and analyze the results of independent compositional activity for its further improvement. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * Use and apply the knowledge of the composition theory in independent visual and decorative-applied educational and creative activities when performing realistic and decorative compositions; * Analyze the compositional features of works of art and their own works; * Explain composition theory when teaching students the visual arts and develop their compositional and creative thinking in practice. |  |  |  | | --- | --- | | Course title | **Fundamentals of Academic Drawing** | | Component | Subject component, University component | | Cycle | Major disciplines | | Module | Theory and practice of art 27 academic credits | | Academic credits | 4 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Art theory and fundamentals of entrepreneurship (1, 2)   Pre-service teachers use theoretical knowledge about the rules of linear-constructive construction of objects on a plane, the laws of linear and aerial perspective, and the rules of tonal relations in academic drawing. They develop their skills in composing and executing academic and creative still lives with different graphic materials and in applying the theory of academic drawing. They also develop their skills in using self- and peer-reflection methods to evaluate the quality of their academic drawings with the aim of further improvement, and in explaining the rules of academic drawing. Pre-service teachers understand the importance of the theory of academic drawing for improving the level of independent visual activity and for the effective facilitation of teaching students’ drawing in practice at school. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * Apply the theory of academic drawing in practice in independent visual activity; * compose and perform academic and creative academic still lives with graphic visual means, sketch with various graphic materials and in various techniques, and self-and peer-reflect when performing educational activities; * explain the knowledge of the principles of teaching the theory and practice of academic drawing in their work as a teacher. |  |  |  | | --- | --- | | Course title | **Methods of teaching craft education and technology** | | Component | Subject component, University component | | Cycle | Major disciplines | | Module | Theory and practice of art 27 academic credits | | Academic credits | 4 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Art theory and fundamentals of entrepreneurship (1, 2)   Pre-service teachers have knowledge of methods of teaching of craft education and technology, can model strategies and technologies of formal and informal art education, plan, lead, teach and evaluate, as well as use a variety of forms and methods of craft education based on the national art in accordance with the capabilities of students.  Pre-service teachers on the basis of independent research have the skills to design the content of education in the field of labor education and technology in accordance with current trends in the development of science. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * choose integrative models of education in the field of craft education and technology; * apply teaching methods in a creative and diverse way, taking into account current trends in the field of craft education and technology; * organize a creative classroom environment; * to use knowledge, forms, methods in the field of craft education and technology |  |  |  | | --- | --- | | Course title | **Fundamentals of academic painting** | | Component | Subject component, Optional component | | Cycle | Major disciplines | | Module | Theory and practice of art 27 academic credits | | Academic credits | 4 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Art theory and fundamentals of entrepreneurship (1, 2)   Pre-service teachers use theoretical knowledge about expressive means of painting, color studies, working with watercolor paints, and educational productions. They develop their skills in composing and executing academic and creative still life paintings in watercolour using the theory of academic representation. They also learn to use self- and peer-reflection and feedback techniques to assess the quality of paintings and to explain the rules of still life painting in watercolour. Pre-service teachers understand the importance of the theory of academic painting for improving the level of independent visual activity and for the effective facilitation of teaching students’ painting in practice at school. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * Apply in practice in independent visual activity when performing still lives in the technique of watercolor painting knowledge of the basics of the theory of color studies, expressive means of painting, and features of pictorial watercolor technique; * use self- and peer-reflection and feedback when performing educational productions of watercolor painting in their work as a teacher; * Apply the knowledge of the principles of teaching the theory and practice of academic painting in their work as a teacher. |  |  |  | | --- | --- | | Course title | **Color science** | | Component | Subject component, Optional component | | Cycle | Major disciplines | | Module | Theory and practice of art 27 academic credits | | Academic credits | 4 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Art theory and fundamentals of entrepreneurship (1, 2)   Pre-service teachers use in their visual activities the theoretical knowledge about the expressive means of painting, basics of color science including the characteristics of color contrasts, color mixing, color language, color harmony, color culture, and rules for working with watercolor paints. They develop their skills in planning and performing educational and creative tasks with watercolor paints using color theory. They also learn to use self- and peer-reflection and feedback techniques to assess the quality of art works and to explain the theoretical basic laws and rules for constructing color-textured compositions. Pre-service teachers understand the importance of color theory and coloristics to improve the level of independent visual activity and for the effective facilitation of teaching students’ the basics of color science in practice at school. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * Apply in practice in independent visual activity the technique of watercolor and gouache painting, the basics of the theory of color science and basic characteristics of color, color contrasts, color mixing, color language, color harmony and color culture; * use self- and peer-reflection and feedback when performing educational productions of watercolor painting and theoretical basic laws and rules for performing color-textured compositions in their work as a teacher; * Apply the knowledge of the principles of teaching the theory and practice of the basics of color science in their work as a teacher. |  |  |  | | --- | --- | | Course title | **Art History of Kazakhstan** | | Component | Subject component, Optional component | | Cycle | Major disciplines | | Module | Theory and practice of art 27 academic credits | | Academic credits | 5 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Art theory and fundamentals of entrepreneurship (1, 2)   Through an independent art research, pre-service teachers summarize and systematize information of the evolution of national fine art as part of the evolution of world culture, and the main milestones of the formation and development of art in Kazakhstan from antiquity to the present. They study the dominant expressive means of the visual language in modern Kazakh art and its connection with the traditional concept, the emergence, genesis, transformation of the tangible and intangible heritage of Kazakhstan. Based on the independent art research, pre-service teachers acquire skills in artistic perception and interpretation of the works of national art from various periods, styles and schools. They understand the importance of art as a special aesthetic sphere of activity and its role in the development of students’ personality and creative potential. They also learn to organize the pedagogical process of artistic perception of students’ art works. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * Use the acquired knowledge about the logic of evolution of art, its styles, schools, and directions in the process of interpretation and aesthetic evaluation of national art as a teacher in the practical activities in formal and non-formal education; * Apply knowledge about art and the choice of artistic style and expressive means as a teacher in the practical activities in formal and non-formal education; * Apply the process of artistic perception in pedagogical practice at school. |  |  |  | | --- | --- | | Course title | **Art education** | | Component | Subject component, Optional component | | Cycle | Major disciplines | | Module | Theory and practice of art 27 academic credits | | Academic credits | 5 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Art theory and fundamentals of entrepreneurship (1, 2)   Through an independent art research, pre-service teachers summarize and systematize information of art and culture as part of the evolution of society, including classical and modern art education, current art practices, art theory, and the main milestones of the formation of art in Kazakhstan from antiquity to the present. The research implemented by the pre-service teachers covers all kinds of art, which allows to draw up a general picture of the evolution of the moral and aesthetic world of the Kazakhs, the elements of ritual and their significance for the formation of the perception of a modern Kazakhstani person. Based on the independent research, pre-service teachers acquire skills in artistic perception and interpretation of art from various periods, styles and schools. They understand the importance of art as a special aesthetic sphere of activity and its role in the development of students’ personality and creative potential. They also learn to organize the pedagogical process of artistic perception of students’ art works. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * Use the acquired knowledge about the logic of evolution of art, its styles, schools, and directions in the process of interpretation and aesthetic evaluation of art as a teacher in the practical activities in formal and non-formal education; * Apply knowledge about art and the choice of artistic style and expressive means as a teacher in the practical activities in formal and non-formal education; * Apply the process of artistic perception in pedagogical practice at school. |  |  | | --- | | **Fundamentals of entrepreneurship 22 academic credits** | | During the module, pre-service teachers build their knowledge in the field of management and art entrepreneurship. They develop their skills through entrepreneurial activities in the field of art. |  |  |  | | --- | --- | | Course title | **Fundamentals of Entrepreneurship** | | Component | Subject component, University component | | Cycle | Major disciplines | | Module | Fundamentals of entrepreneurship 22 academic credits | | Academic credits | 5 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Art theory and fundamentals of entrepreneurship (1, 2)   Pre-service teachers build their understanding of the typology of entrepreneurial activity and demonstrate knowledge about the issues of choosing the sphere of entrepreneurial activity. They are able to identify strategies, content, and specific features of entrepreneurship in teaching. Pre-service teachers study the main areas and functions of entrepreneurship in the modern economy. They understand the importance of entrepreneurship and business in the development of society, and they are able to evaluate the essence and types of responsibility of entrepreneurial decisions and the effectiveness of entrepreneurial activity. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * teach the content and essence of entrepreneurship, the main forms of entrepreneurial cooperation, and the development stages of Kazakhstani and foreign entrepreneurship in the field of art and culture; * understand the impact of entrepreneurship and business on the socio-cultural development of the country and society as a whole. |  |  |  | | --- | --- | | Course title | **Art management** | | Component | Subject component, University component | | Cycle | Major disciplines | | Module | Fundamentals of entrepreneurship 22 academic credits | | Academic credits | 5 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Art theory and fundamentals of entrepreneurship (1, 2)   Pre-service teachers understand the essence, types, patterns and features of organizational development and new management paradigm in the field of art and creative economy, as well as the scientific concepts of management and marketing. Pre-service teachers develop their competences to work as specialists and as middle and senior managers in certain segments of the domestic arts and crafts industry. They learn to apply modern management techniques and applied knowledge of the art market relevant for business owners, ranging from art workshops and creative associations of artisans to large art sites. They also learn to choose and implement appropriate marketing strategies. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * Apply the knowledge of the principles of teaching the content and features of the functioning of the culture and art market, as well as the basics of legal relations in this area; * Teach the specifics of management and the features of the application of analytical directions for the study of ongoing processes in the field of art economics; * Apply the knowledge of the principles of teaching the theory and practice of art management for the organization and implementation of new art projects and the development of business plans in the field of the domestic creative industry. |  |  |  | | --- | --- | | Course title | **Home economics** | | Component | Subject component, University component | | Cycle | Major disciplines | | Module | Fundamentals of entrepreneurship 22 academic credits | | Academic credits | 5 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Art theory and fundamentals of entrepreneurship (1, 2)   Pre-service teachers have a holistic view of the subject and the direction of the household as part of the economy. They understand the socio-economic role of households and can determine the economic behavior of households in terms of income and property differentiation. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * select the main theoretical directions of activity of household entities; * model strategies and technologies for solving specific household problems, planning, and family budget management; * teach the characteristics of economic behavior of households in the areas of consumption and savings, and the methods for calculating economic indicators of household activity. |  |  |  | | --- | --- | | Course title | **Occupational health and safety** | | Component | Subject component, University component | | Cycle | Major disciplines | | Module | Fundamentals of entrepreneurship 22 academic credits | | Academic credits | 2 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Art theory and fundamentals of entrepreneurship (1, 2)   Pre-service teachers develop their knowledge of occupational safety and regulatory and organizational fundamentals of "occupational safety" in classrooms and workshops. They learn to demonstrate responsibility for the correct and safe handling of educational equipment and equipment in educational and industrial workshops. They also develop their skills in safety and industrial sanitation in the workplace and in their ability to provide first aid with medical materials. Pre-service teachers understand the importance of observing safety regulations in practical activities in educational and production workshops and complying with sanitary instructions and work standards. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * follow and teach the safety rules in practical classes and production workshops; * implement a system prevention and safety procedures in art workshops; * use tools and equipment according to the rules and regulations of educational and production workshops; * monitor the sanitary conditions of workplaces and the correct implementation of labor practices. |  |  |  | | --- | --- | | Course title | **Marketing essentials** | | Component | Subject component, Optional component | | Cycle | Major disciplines | | Module | Fundamentals of entrepreneurship 22 academic credits | | Academic credits | 5 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Art theory and fundamentals of entrepreneurship (1, 2)   Pre-service teachers learn about the functions, principles, strategies and concepts of marketing, and marketing tools for promoting products and services on the market. They learn to conduct marketing research, the technology of bringing goods to market, and the basics of consumer communication policy and competition. Pre-service teachers develop their skills in project management learning about the methods and techniques of marketing analysis. They are able to make decisions independently and creatively, navigate a huge flow of socio-economic information, and identify the subjects and objects of regulating business relations. They develop their skills in teaching students marketing activities and active communication in the process of gaining knowledge about the mechanisms of the market. Pre-service teachers develop a good understanding of business concepts, the role of marketing and innovation in modern art business, and the issues of organization and implementation of business processes. They learn to distinguish between problems, trends and issues in the development of an innovative business process. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * Apply the knowledge of the principles of teaching the theory and practice of a business development strategy using strategic marketing tools, and the basics and techniques of marketing in an exciting and accessible way; * promote information about marketing as a promising direction in the labor market for students; * teach alternative options for achieving marketing and corporate goals and tools to create a portfolio of marketing strategies; * develop plans to ensure the implementation of the marketing strategy and its adjustments for a specific market situation; * conduct a strategic analysis of the external and internal marketing environment and apply its results in the development of marketing solutions and strategies. |  |  |  | | --- | --- | | Course title | **Advertising and marketing** | | Component | Subject component, Optional component | | Cycle | Major disciplines | | Module | Fundamentals of entrepreneurship 22 academic credits | | Academic credits | 5 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Art theory and fundamentals of entrepreneurship (1, 2)   Pre-service teachers acquire new knowledge in marketing and advertising management in the field of digital marketing, and professions in the digital and art field. They systematize information about the means, functions and types of advertising, as well as analytics and evaluation of the effectiveness of advertising events and companies. They develop a good understanding of the norms and rules of promotional activities adopted in world practice. Pre-service teachers learn to conduct advertising research independently and to develop, test, and implement innovative products and services. They learn to create creative content and promote it through various communication channels in the art market. They also understand the importance of digital tools and offline advertising in marketing activities for brand promotion. They demonstrate analytical thinking and develop their abilities to generate ideas and work in a team. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * plan and conduct marketing research * develop and implement a system of marketing communications in organizations and art enterprises * use tools and technologies to determine the psychological effectiveness of various means of advertising * Apply the knowledge of the principles of teaching the theory and practice of a strategic analysis of the external and internal marketing and advertising environment, and their results in the development and implementation of advertising strategies. |  |  | | --- | | **Creative mastery 23 academic credits** | | During the module, pre-service teachers develop their knowledge in the field of creative composition, sewing technology, modeling and decoration of clothing, as well as home and food culture. They develop their basic and creative skills in performing and teaching creative work in the field of culture and art. |  |  |  | | --- | --- | | Course title | **Artistic weaving and processing of textile materials** | | Component | Subject component, Optional component | | Cycle | Major disciplines | | Module | Creative mastery 23 academic credits | | Academic credits | 5 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Artistic excellence (3,4,5)   Pre-service teachers develop their knowledge about the types of weaving, the properties of textile materials, traditional and modern technologies of weaving and processing of textile materials, as well as safety procedures when working with tools and devices for weaving and artistic processing of textile materials. They also develop their skills in performing decorative compositions and applied products in various weaving techniques and from textile materials (tapestry, needle carpet, shea, batik, etc.). They learn to teach the characteristics of performing creative compositions and applied products made of various textile materials and in various weaving techniques. Pre-service teachers understand the importance of knowledge about various technologies of weaving and artistic processing of textile materials in making of decorative and applied products, as well as for the purposes of effective facilitation of teaching students decorative and applied creativity, design and technology in their work as a teacher. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * teach the properties of textile materials, safety precautions when working with tools and devices for working with textile materials, types of weaving, features of various techniques and methods of making woven products and artistic processing of textile materials; * Apply the knowledge of the principles of teaching the theory and practice of the properties, technologies, safety techniques, methods of processing textile materials, weaving technologies in creative decorative activities; * use critical and creative thinking, self- and peer-reflection in the process of performing and evaluating decorative works; * teach the characteristics of performing creative compositions and products made of various textile materials with various weaving techniques when teaching students decorative and applied creativity, design and technology in pedagogical practice. |  |  |  | | --- | --- | | Course title | **Carpet weaving and textile art processing** | | Component | Subject component, Optional component | | Cycle | Major disciplines | | Module | Creative mastery 23 academic credits | | Academic credits | 4 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Artistic excellence (3,4,5)   Pre-service teachers develop their knowledge of different traditional and modern types of carpet weaving (tufted, lint-free, needle weaving etc.), properties of traditional and modern textile materials, traditional and modern technologies of weaving and processing textile materials (patchwork, quilting, applique, embroidery etc.), and safety procedures when working with tools and devices for weaving and artistic textile processing. They perform decorative compositions and applied products in different traditional and modern techniques of carpet weaving and textile art products. They are also able to explain the sequence of performance of creative compositions and applied products in textile and different techniques of carpet weaving. Pre-service teachers understand the importance of knowledge of safety rules, various weaving and textile art techniques in the production of decorative and applied items and for the effective teaching of decorative and applied arts and crafts to students in pedagogical practice. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * Teach the properties of textiles and the different techniques of their artistic processing, traditional and modern technologies of carpet weaving, and safety procedures when working with tools and devices; * Perform decorative and applied work using textile processing and carpet weaving techniques; * critically and creatively evaluate, and self- and peer-reflect the process of making decorative and applied works in textiles and in various carpet weaving techniques; * Apply the knowledge of the principles of teaching the theory and practice of the sequence of creative compositions and textile products, in the various techniques of carpet weaving in their work as a teacher. |  |  |  | | --- | --- | | Course title | **Sewing technology** | | Component | Subject component, Optional component | | Cycle | Major disciplines | | Module | Creative mastery 23 academic credits | | Academic credits | 5 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Artistic excellence (3,4,5)   Pre-service teachers develop their knowledge of the technology of processing sewing products, the sequence of their manufacture, knowledge of the characteristics of various styles of clothing, manufacturing technology of the national Kazakh costume, and safety rules when working with tools and equipment of sewing production. They also develop their skills in making sewing products in compliance with technological requirements. Pre-service teachers learn to teach students the sequence and technological features of the processes of tailoring. They understand the importance of technology knowledge in the process of making sewing products and for the purpose of effective facilitation of teaching students sewing in their work as a teacher. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * Apply the knowledge of the principles of teaching the theory and practice of the technological requirements of the processing of sewing products, the sequence of their manufacture, clothing styles, features of the manufacturing technology of the national Kazakh costume, and the safety rules when working with tools, devices and equipment of sewing production; * apply skills of making sewing products in compliance with technological requirements. * teach students the sequence and technological features of the processes of tailoring in their work as a teacher. |  |  |  | | --- | --- | | Course title | **Fashion design** | | Component | Subject component, Optional component | | Cycle | Major disciplines | | Module | Creative mastery 23 academic credits | | Academic credits | 5 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Artistic excellence (3,4,5)   Pre-service teachers develop their knowledge of the features of the processes of designing elegant and casual clothing in various styles, the technology of node processing of clothing, knowledge of the characteristics of various styles of clothing, the features of the national Kazakh costume and the principles of its design, as well as safety rules when working with tools, devices and equipment of sewing production. They learn clothing design in various styles in compliance with technological requirements. They also learn to teach students the sequence and technological features of the processes of fashion design. Pre-service teachers understand the importance of project design knowledge in the process of making elegant and stylized garments and for the purpose of effective facilitation of teaching students fashion design in their work as a teacher. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * Apply the knowledge of the principles of teaching the theory and practice of the basic principles of the development of design projects in the field of fashion design, the technology of sewing clothes in various styles, the principles of using the traditions of the national Kazakh costume in the design of modern clothing, as well as safety rules when working with tools, devices and equipment of sewing production; * facilitate clothing design projects in compliance with stylistic and technological requirements; * teach students the sequence and technological features of the fashion design processes in their work as a teacher. |  |  |  | | --- | --- | | Course title | **Modeling and decoration of clothes** | | Component | Subject component, Optional component | | Cycle | Major disciplines | | Module | Creative mastery 23 academic credits | | Academic credits | 5 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Artistic excellence (3,4,5)   Pre-service teachers develop their knowledge of the design and modeling of clothes, designing of elegant and casual clothes in various styles, the features of working with collections from fashion magazines, samples of folk art, knowledge of the features of various styles of clothing, the features of the Kazakh national costume and the principles of its design using the texture of colored materials and decorative elements, and safety rules at work. They learn complete modeling and designing clothes - from creating patterns to stitching and fitting, as well as the ways and techniques of designing clothes of various assortment of single products, sets, ensembles and creative collections. They also learn to teach students the sequence of creating costume compositions. Pre-service teachers understand the importance of project design knowledge for the design, modeling of elegant and stylized clothing and for the purpose of effective facilitation of teaching students modeling and decorating clothes in their work as a teacher. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * Apply the knowledge of the principles of teaching the theory and practice of the general patterns of the composition organization in various forms of art, the basic principles of modeling and decorating clothes, clothing design in various styles, the principles of using the traditions of the national Kazakh costume in the design of modern clothing, as well as safety rules when working with tools, devices and equipment of sewing production; * facilitate clothing design projects in compliance with stylistic and technological requirements, use the properties of materials when solving design tasks, taking into account technological methods of shaping; * teach students the technological features and sequence of the processes of designing, modeling and decorating clothes, as well as knowledge of modern trends in the world of high and everyday fashion. |  |  |  | | --- | --- | | Course title | **Design of accessories** | | Component | Subject component, Optional component | | Cycle | Major disciplines | | Module | Creative mastery 23 academic credits | | Academic credits | 5 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Artistic excellence (3,4,5)   Pre-service teachers develop their knowledge of the designing and decorating clothes technologies, performing macrame, artistic embroidery, lace weaving, batik, as well as designing collections of modern basic and stylish accessories for elegant and casual clothing models. They learn to use different techniques for decorating clothes and for creating additional modern accessories. They understand the importance of decorating clothes for creating modern collections, and develop their skills in creating the necessary accessories to turn sets into stylish collections and ensembles. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * Apply the knowledge of the principles of teaching the theory and practice of the artistic possibilities of interweaving traditional materials, threads, technologies for performing artistic embroidery, lace, batik for decorating clothes; * develop the composition and design of modern accessories, various techniques for decorating clothing collections, creating artistic images; * teach decorating and decoration techniques to create casual and stylish collections and ensembles. |  |  |  | | --- | --- | | Course title | **Home and Food culture** | | Component | Subject component, Optional component | | Cycle | Major disciplines | | Module | Creative mastery 23 academic credits | | Academic credits | 4 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Artistic excellence (3,4,5)   Pre-service teachers develop their knowledge about the basics of healthy nutrition, cooking technologies, and safety rules when working with household tools and appliances used in the process of cooking and performing household repair work. They learn the basics of creating an aesthetic environment at home (plant growing, decorative floriculture, landscape design, interior layout, ecology of the dwelling), and creating interior design and landscape design projects. They also develop their skills in cooking, performing household repairs, organizing an aesthetic and functional living environment, as well as carrying out interior design and landscape design projects. Pre-service teachers learn to teach students the theory and practice of home culture and nutrition. They understand the importance of special knowledge for the organization of home culture and nutrition, and for the purpose of effective facilitation of teaching students to implement projects on the organization of the environment in their work as a teacher. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * Apply the knowledge of the principles of teaching the theory and practice of the basics of healthy food organization, cooking technology, safety rules when working with various household tools and appliances, the basics of creating and maintaining an aesthetic and functional living environment; as well as the principles of developing interior and landscape design projects; * organize healthy nutrition, cooking technologies, environmental aesthetics and the development of interior and landscape projects; * apply critical and creative thinking, self- and peer-reflection in the implementation and evaluation of projects for the organization of aesthetic and functional living environment; * teach students the sequence and technological features of cooking processes, the performance of household repairs, and the organization of an aesthetic and functional living environment. |  |  |  | | --- | --- | | Course title | **Aesthetics of man-made environment** | | Component | Subject component, Optional component | | Cycle | Major disciplines | | Module | Creative mastery 23 academic credits | | Academic credits | 4 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Artistic excellence (3,4,5)   Pre-service teachers develop their knowledge of the basics of organizing an aesthetic living environment - decorative floriculture and aesthetic landscape design, interior planning and decoration, cooking and table maintenance, and safety rules when working with various household tools and appliances. They learn to organize an aesthetic living environment of the interior and landscape, cooking and table setting, as well as using various household tools and appliances. Pre-service teachers learn to teach students the principles of creating an aesthetic man-made environment. They understand the importance of special knowledge for the organization of a man-made aesthetic and functional living environment, and for the purpose of effective facilitation of teaching students to carry out various projects related to the organization of the environment in their work as a teacher. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * Apply the knowledge of the principles of teaching the theory and practice of the basics of organizing an aesthetic living environment - decorative floriculture and aesthetic landscape design, interior planning and decoration, cooking and table maintenance, as well as safety rules when working with various household tools and appliances; * apply the acquired knowledge in teaching the process of organizing the aesthetic living environment of the house and adjacent territories, its aesthetic design, perform interior and landscape design; * teach students the principles of creating an aesthetic man-made environment and the implementation of interior and landscape projects. |  |  |  | | --- | --- | | Course title | **Design and layout** | | Component | Subject component, Optional component | | Cycle | Major disciplines | | Module | Creative mastery 23 academic credits | | Academic credits | 5 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Digital art and design (6,7)   Pre-service teachers develop their knowledge of the theory and methods of design, in making drawings and maps, techniques for modelling different objects (architectural monuments, interiors, landscapes, vehicles, robots), and in designing of national objects. They develop their skills in designing and modeling various objects from different materials by using computer programs as well as in presenting projects. They also learn to explain the rules and sequence of creative projects, models and products in the learning process. Pre-service teachers understand the importance of design principles and layout techniques in teaching students about design and technology in practice at school. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * Teach the principles and methods of designing objects of design and products of decorative and applied art, technical methods of modeling various objects; * Carry out projects and layouts, decorative and applied art products using the obtained theoretical design knowledge and computer programs; * Critically research and evaluate the design project ideas; * Apply the knowledge of the principles of teaching the theory and practice of the rules and sequence of creative projects, layouts and products in their work as a teacher. |  |  |  | | --- | --- | | Course title | **Architectural graphics and layout** | | Component | Subject component, Optional component | | Cycle | Major disciplines | | Module | Creative mastery 23 academic credits | | Academic credits | 5 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Digital art and design (6,7)   Pre-service teachers develop their knowledge of the rules for architectural graphics, methods and sequences, and techniques for architectural and other layouts. They become proficient in making architectural drawings, architectural and other layouts using their knowledge. They also understand the importance of knowing the rules of architectural drawing and layout techniques in teaching students about design and technology in practice at school. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * Teach the rules for architectural graphics, and techniques for modeling various objects; * Perform architectural drawings and layouts, using the obtained theoretical design knowledge; * Critically research and evaluate the design project ideas; * Apply the knowledge of the principles of teaching the theory and practice of the rules and sequence of architectural drawings and layouts in their work as a teacher. |  |  | | --- | | **Decorative and applied creativity 22 academic credits** | | During the module, pre-service teachers develop their knowledge in the field of decorative and applied arts and crafts. They develop their creative skills in applied and decorative art. |  |  |  | | --- | --- | | Course title | **Artistic processing of traditional materials** | | Component | Subject component, University component | | Cycle | Major disciplines | | Module | Decorative and applied creativity 22 academic credits | | Academic credits | 6 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Artistic excellence (3,4,5)   Pre-service teachers develop their knowledge about safety procedures when working with different tools and devices, the properties of traditional materials (wood, leather, bone, etc.), technologies, techniques, and methods of processing traditional materials (inlaying, engraving, painting, applique, embossing, etc.). They perform skillfully decorative compositions and applied arts and crafts from a variety of traditional materials using a variety of artistic techniques. They are also able to explain profoundly the sequence of creative decorative and applied work from a variety of traditional materials. Pre-service teachers understand the importance of knowing the properties of different traditional materials and their processing techniques, safety rules for their own creative work and for the effective facilitation of teaching students arts and crafts in pedagogical practice. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * Teach the properties of traditional materials, safety procedures when working with different tools and appliances, and the specifics of different techniques for the artistic processing of traditional materials; * Perform skillfully decorative compositions and applied products from traditional materials in compliance with safety rules, using various technological methods of artistic processing; * Critically and creatively evaluate their work in the process of making decorative and applied works from various traditional materials; * Apply the knowledge of the principles of teaching the theory and practice of the sequence of making creative compositions and products from different traditional materials in their work as a teacher. |  |  |  | | --- | --- | | Course title | **Artistic metal processing** | | Component | Subject component, Optional component | | Cycle | Major disciplines | | Module | Decorative and applied creativity 22 academic credits | | Academic credits | 5 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Artistic excellence (3,4,5)     Pre-service teachers develop their knowledge on the properties of different metals, safety procedures when working with tools and appliances for metalwork, technology, and different techniques and methods of metalwork (inlaying, engraving, stamping, embossing, working with wire, etc.). They proficiently execute decorative compositions and applied metalwork using a variety of techniques. They are also able to explain the sequence of performing creative compositions and metal products. Pre-service teachers understand the importance of knowledge of safety, the properties of different metals and metalworking techniques in achieving results in their own creative work and in the effective facilitation of teaching students arts and crafts in their teaching practice. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * Teach the properties of metals, safety procedures when working with tools and appliances for metalwork, features of different techniques, and methods of artistic metalwork; * Apply knowledge of technology, safety, and techniques and methods of metalwork in decorative and applied work; * Critically and creatively evaluate and self- and peer-reflect the process of performing decorative and applied metal works; * Apply the knowledge of the principles of teaching the theory and practice of the sequence of performing creative compositions made of metal in their work as a teacher. |  |  |  | | --- | --- | | Course title | **Jewelry art** | | Component | Subject component, Optional component | | Cycle | Major disciplines | | Module | Decorative and applied creativity 22 academic credits | | Academic credits | 5 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Artistic excellence (3,4,5)   Pre-service teachers develop their knowledge about the properties of metals, traditions of folk jewellery art, current trends in jewellery development, safety procedures when working with tools and appliances for jewellery making, and technology of metal jewellery processing. They are able to make jewelry compositions from various metals using traditional and modern technologies and to explain the peculiarities of performing jewelry compositions made of metal. Pre-service teachers understand the importance of knowledge, the properties of metals, and processing technologies in jewelry for achieving results in own creative work and in the effective facilitation of teaching students arts and crafts in their teaching practice. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * Teach the properties of metals used in jewellery, folk traditions and contemporary trends in jewellery art, safety procedures when working with tools and appliances for metalwork, and the features of various techniques and methods of metal jewellery processing; * Apply knowledge about jewelry art technologies and safety techniques when performing jewelry decorative works; * Critically and creatively evaluate, and self- and peer-reflect the process of performing metal jewelry; * Apply the knowledge of the principles of teaching the theory and practice of the characteristics of metal jewellery in the teaching of decorative and applied arts, design and technology in their work as a teacher. |  |  |  | | --- | --- | | Course title | **Composition of small forms** | | Component | Subject component, Optional component | | Cycle | Major disciplines | | Module | Decorative and applied creativity 22 academic credits | | Academic credits | 5 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Artistic excellence (3,4,5)   Pre-service teachers develop their knowledge in the field of application of modern techniques and technologies, materials for the manufacture of sculpture of small shapes, its types and content, as well as artistic and expressive means of sculpture. They learn skills and techniques of making sculptures of small shapes, performing creative works in three-dimensional plastic from the development of a sketch to the embodiment of an idea in the material. They also understand the role and importance of the volume-plastic art of sculpture for the aesthetic development of students’ personality, and the formation of their spatial thinking for solving artistic and creative tasks. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * Apply the knowledge of the principles of teaching the theory and practice of the methods and techniques of performing small-form sculpture; * use equipment and materials for modeling utilizing both traditional and modern techniques and technologies; * use methods of performing creative works in large-scale plastic for professional activity and in their work as a teacher teaching students sculpture. |  |  |  | | --- | --- | | Course title | **Ceramics and pottery** | | Component | Subject component, Optional component | | Cycle | Major disciplines | | Module | Decorative and applied creativity 22 academic credits | | Academic credits | 5 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Artistic excellence (3,4,5)   Pre-service teachers develop their knowledge in the field of ceramics and pottery. They learn traditional techniques and modern technologies for making ceramic products, and decorative and technological varieties of modern ceramics. They also develop their skills and techniques in working with clay, methods of modeling, processing of raw materials, painting and firing products, and creating souvenirs in ceramics and other pottery materials. Pre-service teachers understand the importance of pottery in the acquaintance and familiarization of students with the world art culture, and the development of their artistic taste, imaginative thinking and creative abilities in the field of applied art. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * Apply the knowledge of the principles of teaching the theory and practice of the methods and techniques of pottery and ceramics; * use tools and devices for processing clay using both traditional and modern techniques and technologies; * use methods of performing creative works in ceramics and pottery for their professional activities and in their work as a teacher. |  |  |  | | --- | --- | | Course title | **Working with natural materials** | | Component | Subject component, Optional component | | Cycle | Major disciplines | | Module | Decorative and applied creativity 22 academic credits | | Academic credits | 6 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Artistic excellence (3,4,5)   Pre-service teachers develop their knowledge of the selection and processing of natural materials for the production of creative works, and the technological features of various materials as one of the ways of self-expression blurring the boundaries between art, nature and learning. They also develop their skills and techniques in working with natural materials transmitting the artistic image of the manufactured object, and preliminary preparing materials for use in work. Pre-service teachers understand the importance of making crafts from natural materials for the formation of interest in creativity in school art education, as well as working with natural materials which includes great opportunities for bringing students closer to their native nature, and fostering a careful, caring attitude towards it. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * Apply the knowledge of the principles of teaching the theory and practice of the methods and techniques of selection, and preparation of natural materials for the manufacture of creative products; * use tools and devices for processing natural materials utilizing both traditional and modern techniques and technologies; * use methods of processing natural materials and making products from them for their professional activities and in their work as a teacher. |  |  |  | | --- | --- | | Course title | **Paper plastic and applique** | | Component | Subject component, Optional component | | Cycle | Major disciplines | | Module | Decorative and applied creativity 22 academic credits | | Academic credits | 6 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Artistic excellence (3,4,5)   Pre-service teachers learn the art of modeling paper art compositions on a plane and creating three-dimensional sculptures. They develop their knowledge of types of paper plastics, and classical and modern techniques for creating plastic compositions and paper souvenirs. They also develop their artistic and design skills in performing large-scale compositions, layouts and models applying knowledge in the field of color science and shaping. Pre-service teachers understand the importance of paper skills for the formation of skills of design and creative work of students, and the development of their imaginative and spatial thinking. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * Apply the knowledge of the principles of teaching the theory and practice of traditional methods and modern techniques of working with paper for the production of creative volume plastic compositions, layouts and models; * teach paper processing methods for the formation of students’ creative spatial thinking, the formation of artistic and design skills; * use methods of working with paper and making compositions, models and layouts from it for their professional activities and in their work as a teacher. |  |  | | --- | | **Design and Modern Technology 22 academic credits** | | During the module, pre-service teachers develop their knowledge in the field of design and learn methods of designing and organizing the creative process. They also study professional computer programs (AutoCAD, Adobe Illustrator, Photoshop, CorelDRAW, etc.) and develop their creative skills for the implementation of design projects in the field of digital art. |  |  |  | | --- | --- | | Course title | **Design Basics** | | Component | Subject component, University component | | Cycle | Major disciplines | | Module | Design and Modern Technology 22 academic credits | | Academic credits | 4 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Digital art and design (6,7)   Pre-service teachers develop their knowledge of design typology, basics of design work, principles and sequence of graphic design projects, and tools knowledge of professional design computer programs (Photoshop, CorelDRAW etc.). They carry out graphic design projects with traditional graphic materials and tools, as well as using computer software tools. They are also able to explain the sequence of graphic design projects. Pre-service teachers understand the importance of specialist knowledge when carrying out graphic design projects, and for the effective facilitation of teaching students the basics of design in practice at school. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * Teach the typology of design, methods and sequence of design projects, and tools of professional design computer programmes (Photoshop, CorelDRAW, etc.); * Carry out graphic design projects using the acquired theoretical knowledge; * Critically and creatively evaluate, and self- and peer-reflect the execution of graphic design projects; * Apply the knowledge of the principles of teaching the theory and practice of the sequence of design projects, including the use of the computer in their work as a teacher. |  |  |  | | --- | --- | | Course title | **Computer graphics** | | Component | Subject component, University component | | Cycle | Major disciplines | | Module | Design and Modern Technology 22 academic credits | | Academic credits | 5 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Digital art and design (6,7)   Pre-service teachers learn to be proficient in using professional computer software tools and computer design programs (Photoshop, CorelDRAW, Adobe AfterEffects, Adobe PremierePro etc.) for creative work and projects, digital learning resources, presentations etc. They are also able to explain the rules and sequence of execution of design projects in the learning process. Pre-service teachers understand the importance of computer software and digital technology in the creation of digital artworks and methodological developments. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * Teach the professional computer programs (Photoshop, CorelDRAW, Adobe AfterEffects, Adobe PremierePro, etc.), rules for creative work and projects, digital learning resources and presentations; * Conduct creative work and projects, digital learning resources and presentations using computer software and media communication tools; * use self- and peer-reflection for the critical evaluation of the creative projects and digital learning resources in their work as a teacher; * Apply the knowledge of the principles of teaching the theory and practice of the rules for creative work using computer software tools in the teaching process. |  |  |  | | --- | --- | | Course title | **Design modern computer programs** | | Component | Subject component, University component | | Cycle | Major disciplines | | Module | Design and Modern Technology 22 academic credits | | Academic credits | 4 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Digital art and design (6,7)   Pre-service teachers develop their knowledge of professional computer programs (Photoshop, CorelDRAW, Adobe AfterEffects, Adobe RgemiegeRgoi, etc.) when performing design projects and methodological developments - digital educational resources, presentations, etc. They learn to carry out design projects and digital methodological development using the tools of professional computer programs. Pre-service teachers learn to teach and facilitate students to implement design projects. They understand the importance of professional computer programs and digital technologies in the development of design projects and methodological development in their work as a teacher. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * Apply the knowledge of the principles of teaching the theory and practice of the tools of professional computer programs (Photoshop, CorelDRAW, Adobe AfterEffects, Adobe PremierePro, etc.), and the rules for the implementation of design projects and digital methodological developments; * facilitate design projects, digital methodological development using computer software tools and media communications; * apply critical and creative thinking when performing and evaluating creative projects and digital educational resources; * teach students the execution of design projects using the tools of computer programs. |  |  |  | | --- | --- | | Course title | **Engineering graphics** | | Component | Subject component, Optional component | | Cycle | Major disciplines | | Module | Design and Modern Technology 22 academic credits | | Academic credits | 5 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Digital art and design (6,7)   Pre-service teachers develop their knowledge of engineering graphics with the AutoCAD computer program and the principles of computer-aided design of 2D drawing and 3D modeling of design projects. They also learn to implement graphic design projects using the tools of the AutoCAD computer programs. Pre-service teachers learn to teach the sequence of graphic design projects, free applications, and the use of theoretical graphic primitives and their modification. They understand the importance of special knowledge for the implementation of design projects, and for the purpose of effective facilitation of teaching students the basics of design in their work as a teacher. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * Apply the knowledge of the principles of teaching the theory and practice of the professional AutoCAD computer program, methods and sequences of execution of design projects, and tools for 2D drawing and 3D modeling of design projects; * professionally execute drawings of design projects with the use of theoretical knowledge obtained; * apply critical and creative thinking, and self- and peer-reflection when performing and evaluating design projects; * teach students the sequence of execution of design projects, including using a computer in their work as a teacher. |  |  |  | | --- | --- | | Course title | **Descriptive geometry and perspective** | | Component | Subject component, Optional component | | Cycle | Major disciplines | | Module | Design and Modern Technology 22 academic credits | | Academic credits | 5 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Digital art and design (6,7)   Pre-service teachers develop their knowledge of projection methods, rules for solving positional and metric problems, constructing the perspective of geometric shapes and bodies, the basics of shadow theory, as well as rules for constructing drawings and axonometric projections in a traditional graphical way. They learn to  construct orthogonal drawings and axonometric projections in the traditional graphical way and with professional computer programs. They also develop their skills in solving positional and metric problems. Pre-service teachers learn to teach students the sequence of execution of drawing and graphic works, also by using a computer. They understand the importance of design and graphic knowledge to be used in technical and creative activities, and for the development of students’ spatial thinking, as well as for the purpose of effective facilitation of teaching students to perform drawings in compliance with the rules of projection drawing, also by using a computer. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * Apply the knowledge of the principles of teaching the theory and practice of projection methods, rules for solving positional and metric problems, constructing the perspective of geometric shapes and bodies, the basics of shadow theory, as well as rules for constructing orthogonal drawings and axonometric projections; * use design and graphic skills in performing drawings, also by using computer software tools, and in solving metric and positional tasks; * teach students the process of learning the sequence of execution of drawing and graphic works in their work as a teacher. |  |  |  | | --- | --- | | Course title | **Modern design** | | Component | Subject component, Optional component | | Cycle | Major disciplines | | Module | Design and Modern Technology 22 academic credits | | Academic credits | 4 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Digital art and design (6,7)   Pre-service teachers develop their theoretical knowledge of modern design, fundamentals of design projecting, and knowledge of professional design computer programs (AutoCAD, 3dsMX, ArchiCAD, etc.). They carry out design projects of various directions (interior design, landscape design, etc.) with the help of design software tools and are able to explain the sequence of design projects. Pre-service teachers understand the importance of specialist knowledge when carrying out different design projects, and for the effective facilitation of teaching students the basics of project activities in practice at school. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * Teach the basics of design computer programs (Photoshop, CorelDRAW, 3dsMAX, etc.); * Perform various design projects using the tools of professional computer programs; * use self- and peer-reflection for the critical and creative evaluation of the execution of different design projects in their work as a teacher; * Apply the knowledge of the principles of teaching the theory and practice of the sequence of design projects, including the use of the computer in their work as a teacher. |  |  |  | | --- | --- | | Course title | **Digital Art** | | Component | Subject component, Optional component | | Cycle | Major disciplines | | Module | Design and Modern Technology 22 academic credits | | Academic credits | 4 | | Course/ competence description | The purpose of this course is to improve the following areas of subject competence:   * Competence area for Digital art and design (6,7)   Pre-service teachers develop their knowledge of works of contemporary digital art (photography, animation, media, etc.) and professional computer programs (Photoshop, CorelDRAW, Adobe AfterEffects - creating animations, Adobe PremierePro - editing videos, etc.). They are proficient in the production of contemporary digital art, animations, etc., using modern ways of communicating aesthetic information in the media space. They also understand the importance of specialist knowledge in the creation of digital art works, and for the effective facilitation of teaching digital art to students in practice at school. | | Learning outcomes | **Pre-service teachers who demonstrate competence can:**   * Teach the methods of creating works of digital art with the help of professional computer programs; * Perform works of digital art using professional computer programs and modern design requirements; * use self- and peer-reflection for the critical and creative evaluation of the process of choosing means of expression and professional computer software tools for creating works of digital art in their work as a teacher; * Post and communicate completed digital works in the media space; * Apply the knowledge of the principles of teaching the theory and practice of the execution of digital art works using computer software tools in their work as a teacher. |  |  | | --- | | **FINAL ATTESTATION 8 academic credits** | | Final attestation of the graduate is mandatory and is carried out after mastering the educational programme in full. The aim of the attestation is to evaluate the level of maturity of general cultural and professional competences of the graduate, as well as their readiness to perform basic professional activities.  **Final attestation work *(Oral Exam, Written Exam, Diploma work, Research project, Development project, Organisational project, Strategic project, Art project)*** | |
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| 4.3 The structure of the compulsory component |
| The Compulsory Component (Cycle of General Education Studies) consists of 56 academic credits (51 academic credits mandatory studies and 5 academic credits optional studies) and includes the following modules and courses.   |  |  | | --- | --- | | **Name of modules and courses** | **Academic credits** | | **COMPULSORY COMPONENT (CYCLE OF GENERAL EDUCATION STUDIES)** | **56** | | **MANDATORY STUDIES** | **51** | | **Module of historical and philosophical competencies** | **10** | | *History of Kazakhstan*  Kazakhstan in Ancient and Medieval Times. Prehistoric society. Settlements, economy, and household (2.5 million - 12 thousand B.C. - 4th century). Ethnogenesis of Kazakh nation. Medieval Kazakhstan (IV-XV cc.). Kazakh Khanate. Geopolitical position of the Kazakh state. Kazakh Khanate: formation, rise, decline. Social history (mid- XV - beginning XVIII cc.). Kazakhstan in a colonial period (30-40s of XVIII - 60s XIX cc). Kazakhstan in the beginning of ХХ century. Formation of a poly-ethnic structure of the population. Kazakhstan in the Soviet period (February-October, 1917 - August, 1991) Kazakhstan - Independent State. The Modern period in the country's history (December 1991 - up to the present). | 5 | | *Philosophy*  Origins of a culture of thinking. The subject and method of philosophy. Foundations of philosophical understanding of the world.  Consciousness, spirit and language. Ontology and metaphysics. Ethics. Philosophy of values. Philosophy of freedom. Philosophy of art. Society and culture. Philosophy of history. Philosophy of religion. Philosophy of modern Kazakhstan. | 5 | | **Module of socio-political knowledge (sociology, political studies, cultural studies, psychology)** | **8** | | *Sociology*  Sociological studies in understanding the social world. Sociological research. Social structure and stratification of society. Socialization and identity. Family and modernity. Deviation, crime, social control. Religion, culture, society. Sociology of ethnicity and the nation. Education and social inequality. Mass media, technology and society. Economics, globalization, labor. Health and medicine. Population, urbanization, and social movements. Social change. | 2 | | *Political studies*  Main stages in the development of political science. Politics as part of social life. Political power. Political elites, leadership. Political system of society. State and civil society. Political regimes. Electoral systems, elections. Political parties, party systems and socio-political movements. Political culture, behavior. Political consciousness, ideology; development, modernization; conflicts and crises. World politics, modern international relations. | 2 | | *Cultural studies*  Morphology of culture. Language of culture. Semiotics of culture. Anatomy of culture. Nomadic culture. Cultural heritage of proto-Turks. Medieval culture.  Central Asia. Cultural heritage of Turks. Basis of the Kazakh culture. Kazakh culture in the XVIII - end of XIX century, XX century. Kazakh culture in the context of modern world processes, and in the context of globalization. Cultural policy of Kazakhstan. State program "Cultural heritage". | 2 | | *Psychology*  Personality in the context of national consciousness.  Me and my motivation. Emotions, emotional intelligence. Human will, psychology of self-regulation. Individual-typological features. Values, interests, norms. Psychology of the meaning of life, professional self-determination, health. Communication between individuals and groups. The perceptive side of communication.  The interactive side of communication. The communicative side of communication. Social and psychological conflict. Patterns of behavior in conflict. Effective communication techniques | 2 | | **Instrumental and communication module** | **25** | | *Russian /Kazakh language*  Proficiency in accurate use of vocabulary, scientific terms, syntactic constructions in oral and written communication; conversation skills. Business communication, letter-writing, report-writing, review, essay-writing skills; meaningful reading of texts, ability to express own idea. Fluent speaking in various conversations, mastering the ability to carry on a conversation, discussion. Functional styles of speech as a historically developed system of speech means, a variety of literature language. | 10 | | *Foreign language*  Social and domestic sphere of communication. Me and my family. Social and cultural sphere of communication. World map. Customs and Traditions. Educational and professional sphere of communication: Future profession. A modern home. Family in modern society.  Cultural and historical background. Education. Profession. Human and nature, environmental problems. News, media, advertising. | 10 | | *Information and communication technologies*  ICT role in society development. Standards in ICT. Introduction to computer systems. Software. Operating systems. Human-computer interaction. Database systems. Data analysis. Data management. Networks and telecommunications. Cybersecurity. Internet technologies. Cloud and mobile technologies. Multimedia technologies. Smart technology. E-technologies. E-business. E-learning. E-government. ICT in industries. Prospects of ICT development. | 5 | | **Health Promotion module** | **8** | | *Physical education*  Principles of physical education. Scientific basis of physical education. Modern recreational systems, basics of body physical state monitoring. Main methods of practicing sports and physical education independently. Professional physical training. General physical training. Speed. Running. Relay races. Execution of exercises for: endurance, flexibility, agility, coordination, balance, gymnastic and acrobatic exercises. Strength. General training exercises. Special physical training. | 8 | | **OPTIONAL COMPONENT** | **5** | | *Basics of Economics and Law*  Social production. The essence, forms and structure of capital. Costs and income of production in a market economy. Business. Financial system. Resource saving. Cyclical economic development. Kazakhstan in the system of global economic relations. Market emergence. Role of the government in business development. The main provisions of the Constitution and current legislation of the Republic of Kazakhstan. System of public administration institutions and the sphere of their authority. Aims, methods of state regulation of economy. Role of public sector in economy. Financial law and finance. Mechanism of interaction between substantive and procedural law. | 5 | | *Basics of an anti-corruption culture*  Anti-corruption culture: a concept, structure, tasks and functions. Anti-corruption awareness and anti-corruption culture: content, role and functions. Formation of anti-corruption culture in foreign countries. Anticorruption culture: mechanisms and institutions for development. Role of a family in fostering an anti-corruption culture. National bases of an anti-corruption culture. Social control as a mechanism of counteracting corruption. Political parties and the mass media as tools for building an anti-corruption culture. Anti-corruption education and upbringing. Anti-corruption legislation and legal liability for corruption. The constitutional basis of anti-corruption. Legal liability for crimes of corruption. Building an anti-corruption culture in civil service and business. | 5 | | *Entrepreneurial skills*  Types of entrepreneurship. Business. Financial system. Time management and project management. Stress management. Negotiation skills. Public speaking skills. Business management skills. Teamwork and leadership skills. Customer service skills. Financial skills. Analytical and problem solving skills. Critical thinking skills. Strategic thinking and planning skills. Technical skills. Time management and organisational skills. Branding, marketing and networking skills. Business management skills. | 5 | | *Ecology and life safety*  Basic laws of functioning of living organisms, ecosystems of different organisational levels, biosphere as a whole, their sustainability. Interaction of biosphere components and ecological consequences of human economic activity, in particular under conditions of nature management intensification. Modern understanding of the concepts, strategies and practical goals of sustainable development in different countries and in the Republic of Kazakhstan. Life safety, its main provisions. Risks, emergencies. Risk analysis, risk management. Human security systems. Modern destabilizing factors. Social, religious, political, economic threats, threats in everyday life. System of security institutions and legal regulation of their activities. | 5 | | *Research methods*  Research approaches. Inductive and deductive reasonings. Qualitative, quantitative, mixed methods research. Primary and Secondary research. Action research. Research designs – descriptive, correlational, experimental, quasi-experimental, cross-sectional, longitudinal, case study, ethnographic, exploratory, explanatory. Variables and hypotheses. Reliability and validity of research. Reproducibility and replicability. Random and systematic error. Triangulation. Sampling. Inclusion and exclusion criteria in sampling. Sampling methods. Collecting data – surveys, interviews, experiments, observational studies, systematic review. Data cleansing. Transcribing interviews. Analysing data – statistical analysis, content analysis, discourse analysis, thematic analysis, textual analysis. Research ethics. Peer review. | 5 | | **Total academic credits** | **56** | |
| 4.4 Progression of the studies |
| |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Modules and courses | **BA degree, 4 academic years** | | | | | | | | | 1. year | | 2. year | | 3. year | | 4. year | | | 1 sem | 2 sem | 3 sem | 4 sem | 5 sem | 6 sem | 7 sem | 8 sem | | **PEDAGOGICAL COMPONENT** | | | | | | | | | | **SUPPORTING LEARNERS AS INDIVIDUALS – 17 academic credits** | | | | | | | | | | Psychology in Education and Concepts of Interaction and Communication 4 academic credits |  |  | 4 |  |  |  |  |  | | Educational Science and Key Theories of Learning 3 academic credits |  |  | 3 |  |  |  |  |  | | Inclusive Educational Environment 3 academic credits |  |  |  |  | 3 |  |  |  | | Age and Physiological Features of the Development of Children 3 academic credits |  | 3 |  |  |  |  |  |  | | Teaching Planning and Individualization of Learning 4 academic credits |  |  |  |  |  | 4 |  |  | | **TEACHING AND ASSESSMENT FOR LEARNING – 9 academic credits** | | | | | | | | | | Teaching Methods and Technologies 5 academic credits |  |  |  | 5 |  |  |  |  | | Assessment and Development 4 academic credits |  |  |  |  | 4 |  |  |  | | **TEACHER AS A REFLECTIVE PRACTITIONER – 9 academic credits** | | | | | | | | | | Pedagogical Research 4 academic credits |  |  | 4 |  |  |  |  |  | | Research, Development and Innovation 5 academic credits |  |  |  |  |  |  | 5 |  | | **TEACHER AS A FACILITATOR OF LEARNING (PEDAGOGICAL PRACTICE) – 25 academic credits** | | | | | | | | | | Introduction to the teaching profession (1st year pedagogical practice) 2 academic credits |  | 2 |  |  |  |  |  |  | | Psychological and pedagogical assessment (2nd year pedagogical practice) 2 academic credits |  |  |  | 2 |  |  |  |  | | Pedagogical approaches (3rd year pedagogical practice) 6 academic credits |  |  |  |  |  | 6 |  |  | | Research and innovation in education (4th year pedagogical practice) 15 academic credits |  |  |  |  |  |  |  | 15 | | **COMPULSORY COMPONENT** | | | | | | | | | | **HISTORICAL AND PHILOSOPHICAL COMPETENCIES – 10 academic credits** | | | | | | | | | | History of Kazakhstan 5 academic credits |  | 5 |  |  |  |  |  |  | | Philosophy 5 academic credits |  |  |  | 5 |  |  |  |  | | **SOCIO-POLITICAL KNOWLEDGE – 8 academic credits** | | | | | | | | | | Sociology 2 academic credits | 2 |  |  |  |  |  |  |  | | Political studies 2 academic credits | 2 |  |  |  |  |  |  |  | | Cultural studies 2 academic credits | 2 |  |  |  |  |  |  |  | | Psychology 2 academic credits | 2 |  |  |  |  |  |  |  | | **INSTRUMENTAL AND COMMUNICATION– 25 academic credits** | | | | | | | | | | Russian /Kazakh language 10 academic credits | 5 | 5 |  |  |  |  |  |  | | Foreign language 10 academic credits | 5 | 5 |  |  |  |  |  |  | | Information and communication technologies 5 academic credits |  |  |  | 5 |  |  |  |  | | **HEALTH PROMOTION – 8 academic credits** | | | | | | | | | | Physical education 8 academic credits | 2 | 2 | 2 | 2 |  |  |  |  | | **Optional Component – 5 academic credits** | | | | | | | | | | Basics of Economics and Law 5 academic credits |  |  |  | 5 |  |  |  |  | | Basics of an anti-corruption culture5 academic credits |  |  |  |  |  |  |  | | Entrepreneurial skills 5 academic credits |  |  |  |  |  |  |  | | Ecology and life safety 5 academic credits |  |  |  |  |  |  |  | | Research methods 5 academic credits |  |  |  |  |  |  |  | | **SUBJECT COMPONENT** | | | | | | | | | | The history of fine art and art research 5 academic credits |  |  | 5 |  |  |  |  |  | | Methods of teaching craft education and technology 4 academic credits |  |  |  |  |  |  |  | 4 | | Basics of composition 5 academic credits |  | 5 |  |  |  |  |  |  | | Fundamentals of Academic Drawing 4 academic credits | 4 |  |  |  |  |  |  |  | | Fundamentals of academic painting 4 academic credits |  | 4 |  |  |  |  |  |  | | Color science 4 academic credits |  |  |  |  |  |  |  | | Art History of Kazakhstan 5 academic credits |  |  |  |  |  | 5 |  |  | | Art education 5 academic credits |  |  |  |  |  |  |  | | Fundamentals of Entrepreneurship 5 academic credits |  |  |  | 5 |  |  |  |  | | Art management 5 academic credits |  |  |  |  |  | 5 |  |  | | Home economics 5 academic credits |  |  |  |  | 5 |  |  |  | | Occupational health and safety 2 academic credits |  |  | 2 |  |  |  |  |  | | Marketing essentials 5 academic credits |  |  |  | 5 |  |  |  |  | | Advertising and marketing 5 academic credits |  |  |  |  |  |  |  | | Artistic weaving and processing of textile materials 4 academic credits |  |  |  | 4 |  |  |  |  | | Carpet weaving and textile art processing 4 academic credits |  |  |  |  |  |  |  | | Sewing technology 5 academic credits |  |  |  | 5 |  |  |  |  | | Fashion design 5 academic credits |  |  |  |  |  |  |  | | Modeling and decoration of clothes 5 academic credits |  |  |  |  |  | 5 |  |  | | Design and accessories 5 academic credits |  |  |  |  |  |  |  | | Home and Food culture 4 academic credits |  |  |  |  |  |  |  | 4 | | Aesthetics of man-made environment 4 academic credits |  |  |  |  |  |  |  | | Design and layout 5 academic credits |  |  |  |  |  |  | 5 |  | | Architectural graphics and layout 5 academic credits |  |  |  |  |  |  |  | | Artistic processing of traditional materials 6 academic credits |  |  |  |  | 6 |  |  |  | | Artistic metal processing 5 academic credits |  |  |  |  |  |  | 5 |  | | Jewelry art 5 academic credits |  |  |  |  |  |  |  | | Composition of small forms 5 academic credits |  |  |  |  |  | 5 |  |  | | Ceramics and pottery 5 academic credits |  |  |  |  |  |  |  | | Working with natural materials 5 academic credits |  |  |  |  |  |  | 5 |  | | Paper plastic and applique 5 academic credits |  |  |  |  |  |  |  | | Design Basics 4 academic credits |  |  | 4 |  |  |  |  |  | | Computer graphics 5 academic credits |  |  |  |  |  |  | 5 |  | | Design modern computer programs 4 academic credits |  |  |  |  |  |  |  | 4 | | Engineering graphics 5 academic credits | 5 |  |  |  |  |  |  |  | | Descriptive geometry and perspective 5 academic credits |  |  |  |  |  |  |  | | Modern design 4 academic credits |  |  |  |  |  |  | 4 |  | | Digital Art 4 academic credits |  |  |  |  |  |  |  | | **FINAL ATTESTATION – 8 academic credits** | | | | | | | | | | Final attestation |  |  |  |  |  |  |  | 8 | | **Academic credits in total** | **30** | **30** | **31** | **29** | **30** | **30** | **30** | **30** | |
| 4.5 Requirements for the successful completion of curriculum |
| For successful completion of the educational program, students shall have:   * minimum credits for core and major subjects; * achievement of all learning outcomes; * successful completion of compulsory and optional courses; * successful fulfillment and defense of Final attestation work *(Oral Exam, Written Exam, Diploma work, Research project, Development project, Organisational project, Strategic project, Art project);* * the minimum average achievement score |

# 5. Description of students’ work

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| Students’ work includes contact teaching, individual, pair and group work, assignments, exams, etc. 1 ECTS = 30 hours of student work.  Students’ individual and/or pair and group work is divided into two parts: individual and/or pair and group work supervised by a teacher and the work that is performed entirely independently.  Students’ individual and/or pair and group work is carried out on a specific list of topics allocated for independent/group study, provided with educational and methodical literature and recommendations for each course. Students’ individual and/or pair and group work supervised by a teacher is carried out according to the schedule, which determines the university or the teacher themselves.    The entire scope of work performed entirely independently is supported by assignments that require the student to work independently on a daily basis.    The ratio of time between classroom contact work, students’ individual and/or pair and group work supervised by a teacher, and the work that is performed entirely independently for all types of educational activities is determined by the educational institution independently. At the same time, the amount of classroom work and students’ individual and/or pair and group work supervised by a teacher is 1440 hours per year, the scope of work that is performed entirely independently - 360 hours per year. |

# 6. Evaluation methods/Assessment

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| 6.1 Assessment |
| The Assessment of learning outcomes is based on the competence objectives of the modules and the resulting evaluation criteria of the courses. Assessment criteria are used as a basis for various tasks. Learning tasks include independent tasks, group tasks, plans, reports, group discussions, group tests, development tasks, laboratory tasks, various tasks for reflection and evaluation, or activating tasks. The assessment generates information for the pre-service teacher about his or her achievement of the competence goals of the pedagogical education modules.  Assessment is at the heart of all competence-based education. Competence-based assessment should measure not only what a pre-service teacher knows, but also take into account skills and whether pre-service teachers can apply what they know to real life problems or situations. Pre-service teachers should be given assignments and non-standard problems in situations that students are likely to encounter in the workplace. Assessment plays a very important role in competence-based training. Based on the recognition of prior competence and personal situation, competence can be demonstrated on a per-course basis. The demonstration of competence can cover the entire training module. Specific guidelines regarding the practice of recognizing and accrediting prior training or training received elsewhere.  Studies are evaluated on a scale basis. Learning achievements (knowledge, abilities, skills and competencies) of pre-service teachers are evaluated in points on a 100-point scale, corresponding to the internationally accepted letter system with a numeric equivalent (positive grades, in descending order, from "A" to "D", and "unsatisfactory" - "FX", "F")  Alphabetic system of evaluation of pre-service teachers' learning achievements, corresponding to the digital equivalent of the four-point system.   |  |  |  |  | | --- | --- | --- | --- | | **Assessment by letter system** | **Digital equivalent of points** | **% content** | **Assessment according to the traditional system** | | А | 4.0 | 95-100 | Excellent | | А- | 3.67 | 90-94 | | В+ | 3.33 | 85-89 | Good | | В | 3.0 | 80-84 | | В- | 2.67 | 75-79 | | С+ | 2.33 | 70-74 | | С | 2.0 | 65-69 | Satisfactory | | С- | 1.67 | 60-64 | | D+ | 1.33 | 55-59 | | D | 1.0 | 50-54 | | FХ | 0.5 | 25-49 | Unsatisfactory | | F | 0 | 0-49 |   The purpose of assessment is to provide guidance and encouragement to pre-service teachers, develop their self-assessment abilities, provide information about pre-service teachers' competences, and ensure that the competences and intended learning outcomes defined in the educational programme are achieved. Self-assessment skills and peer assessment are considered as the main skills of the world of work, and assessment is a central tool to support the development of these skills during study. |
| 6.2 External evaluation |
| **1) Design of new educational programmes Internal quality assurance system**  The new curriculum needs to be designed through engagement with all stakeholders, including students, faculty and employers. The aim throughout the process is to retain and further develop the strengths and high quality of the existing programme while addressing some of the challenges of the current programme, such as the workload demand on students and the need for a course on education management. A survey of all students and alumni, together with focus group discussions and interviews with alumni and employers, also inform the design of the programme. All faculty are involved in discussions of programme aims and learning outcomes, and programme teams worked collaboratively to design the courses for their area of specialization.  On the basis of the faculty (school) of the university, a council on academic quality is formed, which makes decisions on the content and conditions of implementation of curricula, on the policy of evaluation and other academic issues of the faculty (school), organizing a survey of students on the quality of curricula and (or) disciplines/modules.  **2) Procedures for external evaluation of the educational programmes. Continuous Improvement**  All faculty are actively engaged in continuous improvement of their courses as an integral part of the culture of university and their own professionalism as experts in education. In addition to formal student feedback mechanisms such as course evaluations and Student Committee meetings, faculty and students are to communicate closely regarding specific courses and the programme as a whole. The process of continuous reflection and improvement informs the Annual Programme Monitoring process, in which individual faculty reflect on courses they have taught, this feeds into specialization-level reflection and suggestions for improvements, and this in turn goes to programme and School level reflection and plans for further improvement.  Universities have regular, formal mechanisms for obtaining feedback from employers and the professional community. These interactions also inform the continuous improvement of the programme.  For the improvement of the quality assurance of the educational programmes, the universities need to:   * develop an internal quality system that has a delicate balance between quality assurance and quality enhancement. While quality assurance is more of a preventive measure, quality enhancement has higher-order aims and implies transformational change (Jones, 2003). * raise institutional awareness and develop deep understanding of the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) (2015) and implement ESG 2015 standards. * regularly revisit the existing institutional quality processes for ongoing improvement.   **3) Accreditation**  There are institutional and specialised accreditation in Kazakhstan, they remain voluntary for higher educational institutions. However, accreditation is one of the conditions for obtaining state grants for student education. |

# 7. Faculty requirements

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| 7.1 Faculty Requirements |
| Availability of teachers in accordance with the disciplines of the educational programme, the correspondence of teachers' education to the profile of the taught disciplines and/or their academic or research degree of "Doctor of Philosophy (PhD)" or "Doctor in Profile", and/or the academic title of "Associate Professor (Associate Professor)", or "Professor" (if any) and/or teachers with the degree of "Master" to the profile of disciplines and (or) senior teachers with at least three years of experience as a teacher or experience practical work on the profile for at least five years.  The advanced/academic degree of the teaching staff corresponds to the academic degree of the doctor/candidate of sciences or the advanced/academic PhD degree of the doctor or master. Basic education or postgraduate education or doctorate/candidate of science degree, advanced/academic PhD degree must correspond to the subjects taught. |
| 7.2 Additionally Required Faculty |
| Part-time teachers in the main place of work engaged in practical professional activities in the profile of the subjects taught, with at least 3 years of work experience in the field of training. Additionally, leading scientists, specialists from other higher education institutions and research organizations, teachers, and supervisors of schools in corresponding categories such as: expert teacher, research teacher, master teacher, can be involved in the work. |
| 7.3 Required professional development of faculty |
| On the basis of the Law of the Republic of Kazakhstan "On Education" (2007; with amendments dated 27.12.2019) and other regulatory legal acts regulating the activities of higher education organizations in the Republic of Kazakhstan, a teacher who carries out professional activity in a higher education organization has the right for professional development at least once every five years for a duration of no more than four months.  The development of professional competences is also one of the priorities adopted in the Republic of Kazakhstan "Concepts of lifelong learning (continuing education)" (2021). |
| 7.4 Required additional administrative staff |
| Vice-rector for academic affairs is responsible for planning and monitoring the implementation of educational services.  Responsibility for arranging and coordinating the implementation of the specific steps of the procedure and the quality of the outputs rests with the heads of divisions. |

# 8. Resources

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| 8.1 Library Resources |
| The library collection is an integral part of the information resources and includes educational, teaching, scientific and other literature.  Availability of a library fund of educational and scientific literature: in the format of printed and electronic publications for the last ten years, providing 100% of the disciplines of the curricula, including those published in the languages of instruction. Updating of the library fund should be carried out in accordance with the regulations of the Republic of Kazakhstan. |
| 8.2 IT Resources |
| University provides pre-service teachers with educational and teaching literature and (or) electronic resources necessary for successful implementation of curricula, provides the functioning of the information system of education management (high-tech information and educational environment, including the website, information and educational portal, automated system of credit technology training, a set of information and educational resources). |
| 8.3 Infrastructure |
| University provides equipment with educational, methodological, scientific and other literature, classrooms with multimedia complexes, computer rooms, access to broadband Internet, sports, material and technical, educational and laboratory facilities and equipment necessary for the implementation of curriculum. |

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# 9. Additional information

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| 9.1 Additional materials |
| Inclusion is one of the most important cross-cutting principles of the curriculum (see more in Annex 1.). Inclusion in education means that all students, regardless of their possible impairments or disability, should have the opportunity to participate in the regular school systems and study with their peers. The teacher education emphasizes on pre-service teachers’ perceptions of themselves as experts in implementing curriculum for diverse learners based on the principles of pedagogy of difference or universal design for all. It is important to renew inclusive pedagogies such as co-teaching and differentiating. It is important that not only the specialized teachers (special education teachers) but all teachers can work in an inclusive educational environment. Thus, competences of all pre-service teachers need to be developed in areas such as:  ***Knowledge of the concepts and principles of inclusive education***:   * Evaluation of one's own activity in terms of the values of inclusion. * Understanding of the implementation of the principle of inclusiveness in education implemented by a flexible model of the educational process: adaptive programmes, changing the ways of assessing educational achievements. * Understanding of children's different abilities and application of different trajectories to support versatile learners.   ***Practical applications in teaching:***   * Designing of an adapted/individual programme for a child with special education needs in specific subject. * Using of multimodal universal teaching methods, simple structured speech, use alternative communication. |
| 9.2 E-learning |
| The rapid development of digital technologies requires the study of not only specific software tools, but the development of pre-service teachers’ competences on using virtual learning environments and tools in teaching and choosing pedagogical methods suitable for learning processes in digital learning environments (psychological and didactic justification). For this the universities need:   * to create provisions for the professional development of pre-service teachers with the effective use of digital technology; * to develop competences of pre-service teachers on understanding how individual educational needs of their students can be considered when using digital tools or in virtual learning environments; * to develop digital competences of pre-service teachers on using digital learning environments and tools in assessment, such as gamification, digital tests and quizzes, and other formats of digital evaluation; * to promote pre-service teachers’ capabilities in assessing their digital competences and the use of digital tools in pedagogical processes in relation to the requirements of the employers (schools) daily operations; * to put into practice the integration of education, science, and industry, and involve professional communities in teaching school students the basics of applying and using digital technology, and perform an independent assessment of the practical skills acquired; * to include digitalization into the educational process for in-service teachers to increase efficiency and practical application of digitalization in education; * to promote the implementation of global standards in digitalization in initial teacher education (i.e. International Society for Technology in Education (ISTE) and the establishment of an expert community of educators in digitalization. |

# 10. Approval

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| - Ensure a review of the developed curricula, its coordination and approval by the Republican Educational and Methodological Council of Higher and Postgraduate Education.  - Scale up all developed curricula in pedagogical universities |

# **APPENDIX 1**: Main principles of the curriculum

**Competence-based approach**

Competence-based approach is a learning-oriented way to organise and implement teaching. It is an alternative to more traditional educational approaches mainly focusing on what learners are expected to learn about in terms of traditionally-defined subject content. In designing the curriculum following the principles of competence-based approach, the focus is on what we want our students to learn. Thus, it is essential to define the competences that the students are supposed to learn during their degree programs. The articulation of competences should include both discipline specific skills as well as the generic competences or soft skills that the teacher students should develop during the curricula. Soft skills include, for example, leadership, communication and collaboration skills, reflection skills, social and emotional intelligence etc. The development of these soft skills should be included in all the curricula, the competences and learning outcomes as well as the implementation of the curricula.

After defining the degree level competences, the learning outcomes of study units and study modules should compiled by comparing them to the objectives of the entire degree. Learning outcomes represent the desired state, which is expressed as knowledge, skills and attitudes. The written learning outcomes of all the interconnected study units should also make visible the accumulated competence. Planning competence-based learning thus starts at degree programme level and is then realised at study unit level through the learning outcomes, the execution of the study unit and its assessment.

The reason for using competence-based approach to designing curricula is that it makes it possible to design courses and study programs in a more student-centred way. Student-centred approach means that the key knowledge and skills that the students need to achieve during their studies determine the content of the course or study programme. The aim of the competence-based approach to designing curricula is that the students acquire the knowledge, skills and attitudes/values that are essential. Further, the competence-based approach supports students to identify the knowledge and skills specific to their discipline or field of education as well as the generic competences that accumulate during their studies and are common to all degrees.

To sum up the key elements in designing competence-based curricula, it is essential to focus on describing explicitly a) what competences (including subject-specific and general competencies) should a student have after graduation/after study unit/after an individual course, b) how do different study modules, courses and study modes support the development of the competencies, c) how is it ensured that the degree program and the learning objectives of the courses form a coherent entity supporting the development of the competencies, and d) how is it possible for students to make their competence visible (assessment related decision)

The implementation of all curricula should introduce methodologies that promote student-centeredness and active learning, such as gamification, PBL, etc. In a student-centred learning approach, students are active participants, placed at the core of the learning process. The learner is not seen as a passive receiver of knowledge but, rather, an active participant. The teacher's role becomes that of a guide who assists the learner in the difficult process of constructing his/her knowledge. Student-centred approach to teaching broadly means the shift of focus from the teacher to the student and their learning processes (Tran et al., 2010). The emphasis in student-centred approach to teaching is on what the student does and the ways to improve students’ active engagement and deep approach to learning (Biggs and Tang, 2011; Prosser and Trigwell, 2014). In student-centred approach the student is seen as an active constructor of knowledge. Thus, the focus of the student-centred teaching practices is to develop autonomy and active learning that eventually enable lifelong learning.

**Student-centred approach & Active Learning Methodologies**

Student-centredness differs from traditional teaching approach, also known as teacher-centredness, in that the focus is on designing the teaching-learning process in a way that it promotes students’ active participation and deep approach. Teaching that requires active engagement from students is likely to increase quality learning (Biggs and Tang, 2011). However, student-centered learning does not sideline or diminish the role of teachers. Instead, it seeks to use teachers’ expertise in different ways to increase student engagement.

Student-centeredness requires a change in the mindset of the teachers and has many implications for the teaching practices. For example, teaching and learning activities should be designed in a way that they support and promote active learning. Active learning methods place greater responsibility on the learner rather than passive approaches such as lectures. Active learning activities promote higher order thinking skills such as application of knowledge and analysis and engage students in deep learning processes rather than surface learning. Furthermore, they enable students to transfer and apply knowledge better. There is a variety of active learning methods, such as case studies, problem-solving, group projects, debates, peer teaching, games etc. to mention a few. However, it should be kept in mind that the methods should always be chosen purposefully to support the attainment of the intended learning outcomes. Thus, when choosing the active learning methods, it should always be considered from the perspective of which methods support the attainment of the intended learning outcomes in a best possible way.

**Constructive alignment**

The principle of constructive alignment has long been promoted as a powerful way to enhance the quality of teaching and learning (Biggs and Tang, 2011). Constructive alignment is an integrative design for teaching and curriculum design in which the alignment between intended learning outcomes/competences, teaching-learning activities and assessment tasks is emphasised to optimise the conditions for quality learning. The fundamental principle is that curriculum should be designed in such a way that the learning activities and assessment tasks are aligned with the intended learning outcomes (ILOs), and what the students should be able to do or demonstrate after completing the degree, module or a course. High quality learning may be supported by integrating these components together.

Constructive alignment reflects the more general paradigm shift from teacher-centred teaching to student-centred teaching described above. The central step in designing teaching is to define the intended learning outcomes or the competences that the students are supposed to learn during the learning process and how they will demonstrate that learning has taken place (Biggs and Tang, 2011). The role of the instructor is to engage the student in relevant activities that support the attainment of the intended learning outcomes (Biggs, 1996). By choosing appropriate teaching and assessment methods and tasks and aligning them with the intended learning outcomes/competences it is possible to effectively guide students’ study practices and enhance deep, meaning-oriented learning (Biggs and Tang, 2011; Boud and Falchikov, 2006). Constructively aligned teaching is essentially a criterion-referenced system where the central elements, that is, intended learning outcomes, teaching-learning activities and assessment, are aligned and there is consistency throughout these elements.

Constructive alignment should be applied at all levels of the educational system, including institutional, departmental and classroom levels as teaching and learning take place in the whole system. In a good system, all aspects of teaching and assessment are tuned to support high level learning, so that all students are encouraged to use higher-order learning processes.

Figure 1. Illustration of constructive alignment



**Research-based Initial Teacher Education**

The recognition of the importance of research-based teacher education is growing worldwide (Flores, 2018). The research-teaching integration in the teacher educators’ work has been suggested to be an effective solution to develop the profession in many aspects. They should be able to make explicit links between the educational theory, research and teaching practices. There is an increasing recognition that research is an important component of teacher education practices and is beneficial for preparing reflective practitioners (Flores, 2018). Research-based teacher education can take place in different forms. In its simplest form, it can mean that the teaching content is based on research, or that the teaching methods and pedagogical designs are based on research. It can also mean that teachers use inquiry-oriented methods in their teaching to enhance their students’ own knowledge construction and research skills. Moreover, research-based teacher education can mean that the teacher educators themselves conduct research of their own work or more generally about topics related to teacher educators’ work. The different forms of research-based teacher education identified in a recent research are presented in Table 1.

|  |  |
| --- | --- |
| Teaching content is based on research | Teacher educators use their own or others’ research as their teaching content to transfer academic knowledge to student teachers and develop the student teachers’ independent thinking (Visser-Wijnveen et al. 2010). |
| Teaching methods and course design are based on research | Teacher educators benefit from their research work in teacher education and develop their teaching methods accordingly (Cochran-Smith 2005; Krokfors et al. 2011). |
| Applying inquiry-oriented methods in teaching | Teacher educators organise the course based on inquiry-oriented activities to guide student teachers to learn in an analytical and inquiring way to develop their pedagogical thinking (Krokfors et al. 2011). |
| Acting as researchers in teacher education | Teacher educators work as researchers and conduct research on what and how they teach, and on topics in teacher education (Cochran-Smith 2005). |
| Encouraging student teachers’ involvement in research work | Teacher educators involve student teachers in research process to provide them with the experience of conducting research (Visser-Wijnveen et al. 2010). |
| A supportive relationship between research and teaching | Teacher educators consider the research-teaching nexus is complementary and fairly evident. Teaching and research support each other in a general and broad sense. |

Table 1. Forms of research-based teacher education (Cao, Postareff, Lindblom-Ylänne & Toom, 2021

Teacher education can adopt the research-based approach in diverse ways, and it is important to consider what kind of forms fit the cultural context and practices. The ultimate goal of research-based teacher education is to support student teachers to become pedagogically-thinking, reflective and inquiry-oriented teachers with an inquiring attitude towards teaching. Teachers’ pedagogical thinking means the ability to analyse and conceptualise educational occasions and phenomena, to evaluate them as part of larger instructional processes and to make rational and theory-based decisions and justify their decisions and actions as teachers. Their readiness to consume as possibly also conduct research enhances their ability to meet the challenges of the future (Toom et al., 2010).

Research-based teacher education not only enhances the teacher educators’ own professional development, but also enhances teacher students’ reflective and deep learning. By engaging in research-based activities, the students can acquire a set of highly valued competences, such as critical thinking, problem solving and reflective skills (Lunenberg, 2010). Thus, it is important, that teacher educators support the student teachers’ to become reflective practitioners with an inquiring attitude (see Toom et al., 2010), which they can learn not only from what their teachers say about how to teach, but most importantly, from how their teachers engage their students in collaborative and interactive teaching-learning activities (Berry, 2004).

To make research-based teacher education occur in practice, it should be made visible in the teacher education curricula. Secondly, the teacher education programmes should develop their students’ inquiry-oriented and research-oriented approach to their work and enhance their research skills. Becoming an inquiry-oriented reflective practitioner requires time and space to deeply reflect on theory, practice, and the link between them. Therefore, the curriculum of teacher education should provide possibilities for reflection and practicing new skills.

**Interdisciplinary learning**

*Content and Language Integrated Learning (CLIL)*

CLIL (Content and Language Integrated Learning) is a dual-focused educational approach in which an additional language is used for learning and teaching of both content and language (Coyle, Hood & Marsh, 2010:1). The umbrella term of CLIL also includes a range of other language programs, such as bilingual education, English- medium of education or immersion programs (Coyle, 2007; Mehisto, Marsh, and Frigols, 2008). But CLIL differs from those language programs by its equal focus on both content and language (Coyle, 2008; Dalton-Puffer, 2008; De Zarobe, 2008; Marsh, 2012). Thus, this approach is neither language learning nor subject learning but a combination of both; hence, attention is given both to the language and the content. Contrary to the common belief, the CLIL instruction takes place with and through a foreign language and it is not the approach when non-language subjects are taught in the foreign language (Eurydice, 2006).

The reasons for introducing CLIL include provision of a more holistic educational experience for the student as well as content-and language-learning outcomes realized in class. Furthermore, benefits of CLIL are also linked with insights from interdisciplinary research within neurosciences and education (Coyle, Hood & Marsh, 2010). Due to these advantages CLIL is increasingly attracting stakeholders’ attention across continents.

In terms of the curriculum implementation, the CLIL approach is inclusive and flexible; it includes a range of models that can be adapted according to the age, ability and needs of the students (Coyle, 2007). Thus, implementing CLIL varies based on the context. In primary stage, language learning can be embedded across the curriculum and link with one or more subjects of the curriculum. For example, through specific themes or projects (e.g. lifestyle, sports, and holidays).

Secondary CLIL can make specific links between a language and a subject (e.g. history through Kazakh, science through English) or it can take a broader approach integrating language with parts of curriculum. More recently, CLIL is less aligned to a single subject and is evolving through links with a variety of subjects or themes. The content for lessons can include particular aspects of the curriculum for individual subjects. In practical terms, lesson planning involves joint effort across a number of subjects focusing on the cross-curriculum feature for the secondary curriculum. But there is a need for research to explore whether such an approach is compatible with the local context.

The existing curriculum models integrating CLIL vary in length from a single unit which comprise a sequence of 2-3 lessons to a more sustained approach through modules lasting half a term or more. Some successful cases include schools with bilingual sections where subjects are taught through the medium of another language for extensive periods (Coyle et al., 2010).

*STEM (Science, Technology, Engineering, Mathematics) education*

Interdisciplinarity in natural sciences and mathematics, so called STEM -education can be defined as “an effort to combine some or all of the four disciplines of science, technology, engineering, and mathematics into one class, unit, or lesson that is based on connections between the subjects and real-world problems” (Moore et al. (2014). Implementation and integration of engineering in K-12 STEM education. In S. Purzer, J. Strobel, & M. Cardella (Eds.), Engineering in Pre-College Settings: Synthesizing Research, Policy, and Practices (pp. 35–60). West Lafayette: Purdue University Press.). STEM -pedagogy in teacher education aims to prepare students to design, teach and develop research-based active learning STEM -lesson plans to educate competent citizens, who can access and make sense of science relevant to their lives and global perspectives (Feinstein, N. W., Allen, S., & Jenkins, E. (2013). Outside the pipeline: Reimagining science education for nonscientists. Science, 340(6130), 314-317.).

Active learning includes student centered active methods, such that project based education, and benefitting from diverse out of classroom learning environments and communities of learners and ICT. On the hand, Science education should also focus on competences with an emphasis on learning through science and shifting from STEM to STEAM (A = All) by linking science with other subjects and disciplines (Hazelkorn, Ellen & Ryan, Charly & Beernaert, Yves & Constantinou, Costas & Deca, Ligia & Grangeat, Michel & Karikorpi, Mervi & Lazoudis, Angelos & Pintó, Roser & Welzel-Breuer, Manuela (2015). Science Education for Responsible Citizenship. 10.2777/12626). In the ITE curricula in Kazakhstan, the A should include at least developing the English linguistic skills of teacher students (KAZ ITE D-3 Framework Report).

**Digitalisation in Education and Teachers’ Digital competence development**

New information and communication technologies (ICTs) provide teachers and learners with an innovative learning environment to stimulate and enhance the teaching and learning process. In this context, novel educational concepts such as online learning, or blended and hybrid learning are being developed (López-Pérez, Pérez-López & Rodríguez-Ariza, 2011). Hybrid or blended learning can be defined as the integration of face-to-face classroom instruction learning with web-based tools and materials (e.g. Garrison & Kanuka, 2004), as contrast to fully online learning. Blended or hybrid learning is becoming increasingly significant to complement traditional forms of learning. Often these two terms are defined similarly, but can also be differentiated. Blended learning can be defined as a mix of various event-based activities, including conventional face-to-face classrooms instruction, e-learning, and self-paced learning, while in hybrid learning a part of the learning activities and assignments are transferred from the face-to-face environment to the distance learning environment (see Valiathan, 2002, in Koohang, Britz & Seymor, 2006).

Blended forms of learning has the potential to enhance both the effectiveness and efficiency of meaningful learning experiences, and some researchers have suggested that blended learning has the potential to be even more effective and efficient when compared to a traditional classroom model (see Garrison & Kanuka, 2004). Other benefits of blended forms of learning include convenience, student satisfaction, flexibility and higher retention (Koohang, Britz & Seymor, 2006).

Especially in situations where student numbers are high, online, blended or hybrid forms of learning have the potential to provide greater opportunities for improved learning (Osguthorpe & Graham, 2003). In teacher education, student teachers can also learn from their teachers the use of various digital tools and platforms. Thus, not only teacher educators should have the skills to adopt digital tools in their teaching, but also student teachers should develop their digital skills during teacher education. Times faced with uncertainty and sudden changes, such as pandemics, require flexible and advanced use of digital tools and instructional practices functional in online contexts.

**Inclusion in education and recognition of different learners**

Inclusion in education is a principle which means that all students, regardless of their possible impairments or disability, should have the opportunity to participate in the regular school systems and study with their peers. Inclusion is based on several international United Nations declarations, such as the Salamanca Statement (1994) and The Universal Declaration of Human Rights (1948). Inclusive pedagogy is a pedagogical approach that is impacted by the sociocultural context of learning (Florian & Black-Hawkins, 2011) and it aims to respond to the diverse learning needs of students in as varied ways as possible.

The concepts of ‘inclusion’ and ‘diversity’ are reviewed in the teaching and education practices with the activities and arrangements that promote inclusion as the centre. The key words in education are educational equality, accessibility, individuality, lifelong learning and co-operation. The teacher training emphasizes on teachers’ perceptions of themselves as experts in implementing curriculum for diverse learners based on the principles of pedagogy of difference or universal design for all. It is important to renew inclusive pedagogies such as co-teaching and differentiating. The teacher’s task is to teach and guide students to become lifelong learners while taking each student’s individual learning style into account. Four core values related to teaching and learning have been identified as the basis for the work of all teachers in inclusive education (European Agency). These core values are associated with areas of teacher competence. The areas of competence are made up of three elements: attitudes, knowledge and skills. All teachers must commit to the idea of equality for all students. (Saloviita, 2018.)

**Teachers’ professional development and change management**

Considering the dynamic and constantly changing nature of teachers’ work, teachers at all levels must be continuous learners throughout their professional careers. Teachers’ professional development needs to address simultaneously the teachers’ beliefs and conceptions and the improvement in their practices (Timperley & Phillips, 2003), as well as integration of theoretical and practical knowledge (Tynjälä, Häkkinen & Hämäläinen, 2004). Often an experience of a successful implementation in teaching changes teachers’ attitudes and beliefs, and therefore, positive experiences are central for teachers’ professional development (Guskey, 1989).

Development and growing as a teacher can be understood in different ways: 1) growing understanding of one’s content area, in order to become more familiar with what to teach; 2) getting more practical experience as a teacher, in order to become more familiar with how to teach; 3) building up a repertoire of teaching strategies, in order to become more skilful as a teacher; 4) finding out which teaching strategies work best for the teacher, in order to become more effective as a teacher, and 5) continually increasing understanding of what works for students, in order to become more effective in facilitating student learning (Åkerlind, 2007).

It is important to notice, that professional development of teachers is often a slow process. Furthermore, the development is not a linear continuum, but instead, the development may be interrupted by various reasons (Beijaard, Meijer & Verloop, 2004). Some teachers may experience change and development as threatening and change processes often include feelings of anxiety or uncertainty (Postareff et al., 2008). Such negative emotions towards the change may narrow the teacher’s attention (Fredrickson, 2001). Therefore, it is important to ensure that teachers receive enough support from diverse sources (e.g. peers, supervisors, work environment) and encouraging feedback. It is also important for teachers to understand, that failures are part of the teachers’ professional development, and mistakes should be seen as learning opportunities. When teachers have the possibility to share experiences and engage in collaboration with their peers, it has been shown to have positive influences of their learning and development (Voogt, et al., 2011). When teachers feel well and are engaged in their work, they are more likely to engage in pedagogical practices that promote their development (Fredrickson, 2001) The development of teaching is, at best, a continuous process, and thus, teachers should be encouraged to reflect on their own teaching on a continuous basis to increase their pedagogical awareness (Parpala & Postareff, 2021).

Teachers should also be provided with agency, which refers to the teacher’s possibilities to influence, make decisions and take actions. The aim of exercising agency is to create new work practices and transforming the course of activities (Hökkä et al., 2012). When teachers have a possibility engage in development and changes, and when they experience that their opinions truly matter, they are likely to become highly engaged in their work (e.g. Day, Elliot & Kington, 2005; Pyhältö et al. 2012).

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